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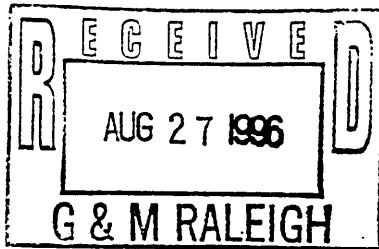


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

August 1, 1996

Subject: Region 9 Preliminary Remediation Goals (PRGs) 1996

From: Stanford J. Smucker, Ph.D.
Regional Toxicologist (H-9-3)
Technical Support Team

To: PRG Table Mailing List

Please find the annual update to the Region 9 PRG table. The table has been revised to reflect the most current EPA toxicological and risk assessment information. Updates to EPA toxicity values were obtained from IRIS through July 1996, HEAST through May 1995, and EPA's National Center for Environmental Assessment (NCEA, formerly ECAO).

Region 9 PRGs are "evergreen" and have evolved as new methodologies and parameters have been developed. In several cases the models, equations, and assumptions presented in RAGS HHEM, *Part B, Development of Risk-Based Preliminary Remediation Goals* (1991) have been replaced with new information that is consistent with the document, *Soil Screening Guidance*, recently issued by the Office of Solid Waste and Emergency Response (OSWER), dated April 1996.

The updated PRG table also contains soil screening levels (SSLs) for protection of groundwater. The SSLs were obtained directly from EPA/OSWER's *Soil Screening Guidance* document which is available from NTIS as EPA/540/R-96/018 and EPA/540/R-95/128. Please note that because R 9 PRGs currently evaluate intermedia transfer of volatile organic chemicals (VOCs) and heavy metals from soil to air, the PRG table does not include a separate list of SSLs for the air pathway.

To help users rapidly identify substances with new PRGs, these contaminants are printed in boldface type. Changes in PRG values are either due to new toxicity constants or new physico-chemical information. This version of the table contains revised toxicity values for acetaldehyde, chlorine cyanide, 1,3-dichlorobenzene, 2-dichloroethane, endosulfan, manganese, phosphoric acid, and 1,1,1-trichloroethane. Also, 23 additional VOCs have been identified and evaluated for inhalation exposures resulting from intermedia transfer from soil and water to air.

EPA Region 9 has established a homepage on the World Wide Web which you can find at <http://www.epa.gov/region 9/>. Our homepage will soon include the PRG table in downloadable form. The electronic table contains additional information not presented in the printed table (e.g. physico-chemical constants, non-cancer PRGs for carcinogens, pathway-specific PRGs, and volatilization factors for VOCs). Meanwhile, we still provide the electronic PRG table (PRG96.zip) on California Regional Water Board's BBS (510.286.0404) for those of you who have a modem.

Before relying on any number in the table, it is recommended that the user verify the numbers with an agency toxicologist or risk assessor because the toxicity / exposure information in the table may contain errors or default assumptions that need to be refined based on further evaluation. If you find an error please send me a note via email at Smucker.Stan@epamail.epa.gov or fax at 415.744.1916.

EXHIBIT 1-1
TYPICAL EXPOSURE PATHWAYS BY MEDIUM
FOR RESIDENTIAL AND INDUSTRIAL LAND USES*

EXPOSURE PATHWAYS, ASSUMING:		
MEDIUM	RESIDENTIAL LAND USE	INDUSTRIAL LAND USE
Ground Water	<i>Ingestion from drinking</i>	Ingestion from drinking
	<i>Inhalation of volatiles</i>	Inhalation of volatiles
	Dermal absorption from bathing	Dermal absorption
Surface Water	<i>Ingestion from drinking</i>	Ingestion from drinking
	<i>Inhalation of volatiles</i>	Inhalation of volatiles
	Dermal absorption from bathing	Dermal absorption
	Ingestion during swimming	
	Ingestion of contaminated fish	
Soil	<i>Ingestion</i>	<i>Ingestion</i>
	<i>Inhalation of particulates</i>	<i>Inhalation of particulates</i>
	<i>Inhalation of volatiles</i>	<i>Inhalation of volatiles</i>
	Exposure to indoor air from soil gas	Exposure to indoor air from soil gas
	Exposure to ground water contaminated by soil leachate	Exposure to ground water contaminated by soil leachate
	Ingestion via plant, meat, or dairy products	Inhalation of particulates from trucks and heavy equipment
	<i>Dermal absorption</i>	<i>Dermal absorption</i>

Footnote:

*Exposure pathways considered in the PRG calculations are indicated in boldface italics.

pollutant risks.

In addition to Region 9 PRGs, the PRG table also includes California EPA PRGs ("CAL-Modified PRGs") for specific chemicals where CAL-EPA values may be more restrictive than the federal values; and, soil screening levels (SSLs) for protection of groundwater (see Section 2.3 below).

2.2 Toxicity Values

EPA toxicity values, known as noncarcinogenic reference doses (RfD) and carcinogenic slope factors (SF) were obtained from IRIS through July 1996, HEAST through May 1995, and EPA's National Center for Environmental Assessment (NCEA, formerly ECAO). The priority among sources of toxicological constants used are as follows: (1) IRIS (indicated by "i"), (2) HEAST ("h"), (3) NCEA ("n"), and (4) withdrawn from IRIS or HEAST and under review ("x").

Route-to-route extrapolations ("r") were frequently used when there were no toxicity values available for a given route of exposure. Oral cancer slope factors ("SFo") and reference doses ("RfDo") were used for both oral and inhaled exposures for organic compounds lacking inhalation values. Inhalation slope factors ("SFi") and inhalation reference doses ("RfDi") were used for both inhaled and oral exposures for organic compounds lacking oral values. An additional route extrapolation is the use of oral toxicity values for evaluating dermal exposures. Although route-to-route methods are a useful screening procedure, the appropriateness of these default assumptions for specific contaminants should be verified by a toxicologist.

To help users rapidly identify substances with new PRGs, these contaminants are printed in boldface type. This version of the table contains revised toxicity values for acetaldehyde, chlorine cyanide, 1,3-dichlorobenzene, 2-dichloroethane, endosulfan, manganese, phosphoric acid, and 1,1,1-trichloroethane.

2.3 Soil Screening Levels

Generic soil screening levels (SSLs) for the protection of groundwater have been included in the PRG table for 100 of the most common contaminants at Superfund sites. Generic SSLs are derived using default values in standardized equations presented in *Soil Screening Guidance* (available from NTIS as document numbers PB96-963502 and PB96-963505 or EPA/540/R-95/128 and EPA/540/R-96/018).

The SSLs were developed using a default dilution-attenuation factor (DAF) of 20 to account for natural processes that reduce contaminant concentrations in the subsurface. Also included are generic SSLs that assume no dilution or attenuation between the source and the receptor well (i.e., a DAF of 1). These values can be used at sites where little or no dilution or attenuation of soil leachate concentrations is expected at a site (e.g., sites with shallow water

3.1 Developing a Conceptual Site Model

The primary condition for use of PRGs is that exposure pathways of concern and conditions at the site match those taken into account by the PRG framework. Thus, it is always necessary to develop a conceptual site model (CSM) to identify likely contaminant source areas, exposure pathways, and potential receptors. This information can be used to determine the applicability of PRGs at the site and the need for additional information. For those pathways not covered by PRGs, a risk assessment specific to these additional pathways may be necessary. Nonetheless, the PRG lookup values will still be useful in such situations for focusing further investigative efforts on the exposure pathways not addressed.

To develop a site-specific CSM, perform an extensive records search and compile existing data (e.g. available site sampling data, historical records, aerial photographs, and hydrogeologic information). Once this information is obtained, CSM worksheets such as those provided in ASTM's *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (1995) can be used to tailor the generic worksheet model to a site-specific CSM. The final CSM diagram represents linkages among contaminant sources, release mechanisms, exposure pathways and routes and receptors. It summarizes our understanding of the contamination problem.

As a final check, the CSM should answer the following questions:

- Are there potential ecological concerns?
- Is there potential for land use other than those covered by the PRGs (that is, residential and industrial)?
- Are there other likely human exposure pathways that were not considered in development of the PRGs (e.g. impact to groundwater, local fish consumption; raising beef, dairy, or other livestock)?
- Are there unusual site conditions (e.g. large areas of contamination, high fugitive dust levels, potential for indoor air contamination)?

If any of these four conditions exist, the PRG may need to be adjusted to reflect this new information. Suggested references for evaluating pathways not currently evaluated by Region 9 PRG's are presented in Exhibit 3-1.

consulting a staff toxicologist at state and / or federal regulatory agencies.

Where anthropogenic background levels exceed PRGs and EPA has determined that a response action is necessary and feasible, EPA's goal will be to develop a comprehensive response to the widespread contamination. This will often require coordination with different authorities that have jurisdiction over the sources of contamination in the area.

3.3 Risk Screening

A suggested stepwise approach for screening sites with PRGs is as follows:

- Perform an extensive records search and compile existing data.
- Identify site contaminants in the PRG Table. Record the PRG concentrations for various media and note whether PRG is based on cancer risk (indicated by "ca") or noncancer hazard (indicated by "nc"). Segregate cancer PRGs from non-cancer PRGs and exclude (but don't eliminate) non-risk based PRGs ("sat" or "max").
- For cancer risk estimates, take the site-specific concentration (maximum or 95 UCL) and divide by the PRG concentrations that are designated for cancer evaluation ("ca"). Multiply this ratio by 10^{-6} to estimate chemical-specific risk. For multiple pollutants, simply add the risk for each chemical :

$$Risk = [(\frac{conc_x}{PRG_x}) + (\frac{conc_y}{PRG_y}) + (\frac{conc_z}{PRG_z})] \times 10^{-6}$$

- For non-cancer hazard estimates. Divide concentration term by its respective non-cancer PRG designated as "nc" and sum the ratios for multiple contaminants. [Note that carcinogens may also have an associated non-cancer PRG that is not listed in the printed copy of the table and these will also need to be obtained in order to complete the non-cancer evaluation.] The non-cancer ratio represents a hazard index (HI). A hazard index of 1 or less is generally considered safe . A ratio greater than 1 suggests further evaluation:

$$Hazard Index = [(\frac{conc_x}{PRG_x}) + (\frac{conc_y}{PRG_y}) + (\frac{conc_z}{PRG_z})]$$

For more information on screening site risks, the reader should contact EPA Region 9's Technical Support Team.

Document (USEPA 1996a,b).

To address the soil-to-air pathways the PRG calculations incorporate volatilization factors (VF_x) for volatile contaminants and particulate emission factors (PEF) for nonvolatile contaminants. These factors relate soil contaminant concentrations to air contaminant concentrations that may be inhaled on-site. The VF_x and PEF equations can be broken into two separate models: an emission model to estimate emissions of the contaminant from the soil and a dispersion model to simulate the dispersion of the contaminant in the atmosphere.

It should be noted that the box model in RAGS Part B has been replaced with a dispersion term (Q/C) derived from a modeling exercise using meteorological data from 29 locations across the United States because the box model may not be applicable to a broad range of site types and meteorology and does not utilize state-of-the-art techniques developed for regulatory dispersion modeling. The dispersion model for both volatiles and particulates is the AREA-ST, an updated version of the Office of Air Quality Planning and Standards, Industrial Source Complex Model, ISC2. However, different Q/C terms are used in the VF and PEF equations. Los Angeles was selected as the 90th percentile data set for volatiles and Minneapolis was selected as the 90th percentile data set for fugitive dusts (USEPA 1996 a,b). A default source size of 0.5 acres was chosen for the PRG calculations. This is consistent with the default exposure area over which Region 9 typically averages contaminant concentrations in soils. If unusual site conditions exist such that the area source is substantially larger than the default source size assumed here, an alternative Q/C could be applied (see USEPA 1996a,b).

Volatilization Factor for Soils

Volatile chemicals, defined as those chemicals having a Henry's Law constant greater than 10^{-5} (atm-m³/mol) and a molecular weight less than 200 g/mole, were screened for inhalation exposures using a volatilization factor for soils (VF_x). Please note that VF_x's are available in the electronic version of the PRG table.

The emission terms used in the VF_x are chemical-specific and were calculated from physical-chemical information obtained from a number of sources including *Superfund Exposure Assessment Manual* (SEAM, EPA 1988), *Subsurface Contamination Reference Guide* (EPA 1990a), *Fate and Exposure Data* (Howard 1991), and *Superfund Chemical Data Matrix* (USEPA 1994c). In those cases where Diffusivity Coefficients (Di) were not provided in existing literature, Di's were calculated using Fuller's Method described in SEAM. A surrogate term was required for some chemicals that lacked physico-chemical information. In these cases, a proxy chemical of similar structure was used that may over- or under-estimate the PRG for soils. Physico-chemical information is available in the electronic version of the PRG table. To access this information, the user should display the hidden columns in the table.

Equation 4-9 forms the basis for deriving generic soil PRGs for the inhalation pathway. The following parameters in the standardized equation can be replaced with specific site data to

Note: the generic PEF evaluates windborne emissions and does not consider dust emissions from traffic or other forms of mechanical disturbance that could lead to greater emissions than assumed here.

4.2 Dermal Contact with Contaminants in Soil

Much uncertainty surrounds the determination of hazards associated with skin contact with soils. One important data gap is the lack of EPA verified toxicity values for the dermal route. For screening purposes it is assumed that dermal toxicity values can be route-to-route extrapolated from oral values but this may not always be an appropriate assumption and should be checked.

Thus far, chemical-specific absorption values for skin have been recommended for only five chemicals (arsenic, cadmium, pentachlorophenol, PCBs, and dioxin) by EPA's Office of Research and Development. For all other chemicals, default absorption values for inorganics and organics are assumed to be 1 and 10 percent, respectively. At 10 % skin absorption, the dermal dose is estimated to equal an ingestion dose for adults, using the best estimate default values in *Dermal Exposure Assessment: Principles and Applications* (EPA 1992). At 1 % absorption, the dermal dose is estimated to be 10% of the oral dose (i.e. based on an adult ingestion rate of 100 mg per day). Note: worker and children intake rates (50 and 200 mg per day, respectively) yield somewhat different results.

$$\text{dermal dose} = \text{ingestion dose}$$

$$C_{\text{soil}} \times ABS \times AF \times SA = C_{\text{soil}} \times IR$$

$$ABS = \frac{(100\text{mg/day})}{[(0.2\text{mg/cm}^2\text{-day})(5000\text{cm}^2)]} = 0.10$$

4.3 SSLs for the Migration to Groundwater Pathway

The methodology for calculating SSLs for the migration to groundwater was developed to identify chemical concentrations in soil that have the potential to contaminate groundwater. Migration of contaminants from soil to groundwater can be envisioned as a two-stage process: (1) release of contaminant in soil leachate and (2) transport of the contaminant through the underlying soil and aquifer to a receptor well. The SSL methodology considers both of these fate and transport mechanisms.

SSLs are backcalculated from acceptable ground water concentrations (i.e. nonzero MCLGs, MCLs, or risk-based PRGs). First, the acceptable groundwater concentration is multiplied by a dilution factor to obtain a target leachate concentration. For example, if the dilution factor

(2) skin contact([mg·yr]/[kg·d]):

$$SFS_{adj} = \frac{ED_c \times AF \times SA_c}{BW_c} + \frac{(ED_r - ED_c) \times AF \times SA_a}{BW_a}$$

(3) inhalation ([m³·yr]/[kg·d]):

$$InhF_{adj} = \frac{ED_c \times IRA_c}{BW_c} + \frac{(ED_r - ED_c) \times IRA_a}{BW_a}$$

4.5 PRG Equations

The equations used to calculate the PRGs for carcinogenic and noncarcinogenic contaminants are presented in Equations 4-1 through 4-8. The PRG equations update RAGS Part B equations. Briefly, PRGs are risk assessments run in reverse. The methodology backcalculates a soil, air, or water concentration level from a target risk (for carcinogens) or hazard quotient (for noncarcinogens). For completeness, the soil equations combine risks from ingestion, skin contact, and inhalation simultaneously. Note: the electronic version of the table also includes pathway-specific PRGs, should the user decide against combining specific exposure pathways; or, the user wants to identify the relative contribution of each pathway to exposure.

To calculate PRGs for volatile chemicals in soil, a chemical-specific volatilization factor is calculated per Equation 4-9. Because of its reliance on Henry's law, the VF_c model is applicable only when the contaminant concentration in soil is at or below saturation (i.e. there is no free-phase contaminant present). Soil saturation ("sat") corresponds to the contaminant concentration in soil at which the adsorptive limits of the soil particles and the solubility limits of the available soil moisture have been reached. Above this point, pure liquid-phase contaminant is expected in the soil. If the PRG calculated using VF_c was greater than the calculated sat, the PRG was set equal to sat, in accordance with *Soil Screening Guidance* (USEPA 1996 a,b). The updated equation for deriving sat is presented in Equation 4-10.

PRG EQUATIONS

Soil Equations: For soils, equations were based on three exposure routes (ingestion, skin contact, and inhalation).

Equation 4-1: Combined Exposures to Carcinogenic Contaminants in Residential Soil

$$C(\text{mg/kg}) = \frac{\text{TR} \times AT_c}{EF_r [(\frac{IFS_{adj} \times CSF_o}{10^6 \text{mg/kg}}) + (\frac{SFS_{adj} \times ABS \times CSF_o}{10^6 \text{mg/kg}}) + (\frac{InhF_{adj} \times CSF_i}{VF_s})]}$$

Equation 4-2: Combined Exposures to Noncarcinogenic Contaminants in Residential Soil

$$C(\text{mg/kg}) = \frac{\text{THQ} \times BW_c \times AT_n}{EF_r \times ED_c [(\frac{1}{RfD_o} \times \frac{IRS_c}{10^6 \text{mg/kg}}) + (\frac{1}{RfD_o} \times \frac{SA_c \times AF \times ABS}{10^6 \text{mg/kg}}) + (\frac{1}{RfD_i} \times \frac{IRA_c}{VF_s})]}$$

Equation 4-3: Combined Exposures to Carcinogenic Contaminants in Industrial Soil

$$C(\text{mg/kg}) = \frac{\text{TR} \times BW_a \times AT_c}{EF_o \times ED_o [(\frac{IRS_o \times CSF_o}{10^6 \text{mg/kg}}) + (\frac{SA_a \times AF \times ABS \times CSF_o}{10^6 \text{mg/kg}}) + (\frac{IRA_a \times CSF_i}{VF_s})]}$$

Equation 4-4: Combined Exposures to Noncarcinogenic Contaminants in Industrial Soil

$$C(\text{mg/kg}) = \frac{\text{THQ} \times BW_a \times AT_n}{EF_o \times ED_o [(\frac{1}{RfD_o} \times \frac{IRS_o}{10^6 \text{mg/kg}}) + (\frac{1}{RfD_o} \times \frac{SA_a \times AF \times ABS}{10^6 \text{mg/kg}}) + (\frac{1}{RfD_i} \times \frac{IRA_a}{VF_s})]}$$

Footnote:

*Use VF_s for volatile chemicals (defined as having a Henry's Law Constant [atm-m³/mol] greater than 10⁶ and a molecular weight less than 200 grams/mol) or PEF for non-volatile chemicals.

SOIL-TO-AIR VOLATILIZATION FACTOR (VF_s)

Equation 4-9: Derivation of the Volatilization Factor

$$VF_s (m^3/kg) = (Q/C) \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times \rho_b \times D_A)} \times 10^{-4} (m^2/cm^2)$$

where:

$$D_A = \frac{[(\Theta_a^{10/3} D_i H' + \Theta_w^{10/3} D_w) / n^2]}{\rho_b K_d + \Theta_w + \Theta_a H'}$$

<u>Parameter</u>	<u>Definition (units)</u>	<u>Default</u>
VF _s	Volatilization factor (m ³ /kg)	—
D _A	Apparent diffusivity (cm ² /s)	—
Q/C	Inverse of the mean conc. at the center of a 0.5-acre square source (g/m ² -s per kg/m ³)	68.81
T	Exposure interval (s)	9.5 x 10 ⁸
ρ_b	Dry soil bulk density (g/cm ³)	1.5
Θ_a	Air filled soil porosity (L _{air} /L _{soil})	0.28 or n- Θ_w
n	Total soil porosity (L _{pore} /L _{soil})	0.43 or 1 - (ρ_b/ρ_s)
Θ_w	Water-filled soil porosity (L _{water} /L _{soil})	0.15
ρ_s	Soil particle density (g/cm ³)	2.65
D _i	Diffusivity in air (cm ² /s)	Chemical-specific
H	Henry's Law constant (atm-m ³ /mol)	Chemical-specific
H'	Dimensionless Henry's Law constant	Calculated from H by multiplying by 41 (USEPA 1991a)
D _w	Diffusivity in water (cm ² /s)	Chemical-specific
K _d	Soil-water partition coefficient (cm ³ /g) = K _{oc} f _{oc}	Chemical-specific
K _{oc}	Soil organic carbon-water partition coefficient (cm ³ /g)	Chemical-specific
f _{oc}	Fraction organic carbon in soil (g/g)	0.006 (0.6%)

SOIL-TO-AIR PARTICULATE EMISSION FACTOR (PEF)

Equation 4-11: Derivation of the Particulate Emission Factor

$$PEF (m^3/kg) = Q/C \times \frac{3600 s/h}{0.036 \times (1-V) \times (U_m/U_t)^3 \times F(x)}$$

<u>Parameter</u>	<u>Definition (units)</u>	<u>Default</u>
PEF	Particulate emission factor (m ³ /kg)	1. 316 x 10 ³
Q/C	Inverse of the mean concentration at the center of a 0.5-acre-square source (g/m ² -s per kg/m ³)	90.80
V	Fraction of vegetative cover (unitless)	0.5
U _m	Mean annual windspeed (m/s)	4.69
U _t	Equivalent threshold value of windspeed at 7 m (m/s)	11.32
F(x)	Function dependent on U _m /U _t , derived using Cowherd (1985) (unitless)	0.194

REFERENCES

ASTM. 1995. *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites.* Designation E 1739 - 95. Philadelphia, Pennsylvania.

California EPA. 1994. *Preliminary Endangerment Assessment Guidance Manual.* Department of Toxic Substances Control, Sacramento, California.

Cowherd, C., G. Muleski, P. Engelhart, and D. Gillette. 1985. *Rapid Assessment of Exposure to Particulate Emission from Surface Contamination.* EPA/600/8-85/002. Prepared for Office of Health and Environmental Assessment, U.S. Environmental Protection Agency, Washington, DC. NTIS PB85-192219 7AS.

Howard, P.H. 1990. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals.* Lewis Publishers, Chelsea Michigan.

U.S. EPA. 1988. *Superfund Exposure Assessment Manual.* EPA/540/1-88/001. Office of Emergency and Remedial Response, Washington, DC.

U.S. EPA. 1990a. *Subsurface Contamination Reference Guide.* EPA/540/2-90/011. Office of Emergency and Remedial Response, Washington, DC.

FOR PLANNING PURPOSES

TOXICITY INFORMATION

Contaminant	Preliminary Remedial Goals (PRGs) ^a										Soil Screening Levels			
	SDI 1/(mg/kg-d)	RfD 6 hr (mg/kg-d)	RfD 1 hr (mg/kg-d)	V _{skin} C _{abs} CAS No.	V _{skin} C _{abs} CAS No.	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air Soil (mg/kg)	Tap Water (µg/L)	Migration to Ground Water DAF 1 (mg/kg)	Migration to Ground Water DAF 20 (mg/kg)	Migration to Ground Water DAF 1 (mg/kg)		
Acetophenone	0.7E-03 l	4.0E-03 r	4.0E-03 r	0 0.10 30380-18-1	1 0.10 75-07-0	5.1E+01 ca*	2.2E+02 ca*	7.7E-01 ca*	7.7E+00 ca*	9.2E+00 ca*	2.1E+01 ca**	8.7E-01 ca*	1.5E+00 ca*	
Acetone	7.7E-03 r	2.6E-03 l	2.6E-03 l	0 0.10 34558-82-1	1 0.10 75-88-5	1.3E+03 ns	1.4E+04 ns	7.3E+01 ns	7.3E+00 ns	2.1E+00 ca*	8.8E+03 ns	3.7E+02 ns	6.1E+02 ns	
Acetonitrile	1.0E-01 l	1.0E-01 r	1 0.10 87-04-1	1 0.10 75-05-8	2.1E+03 ns	5.5E+02 ns	1.2E+03 ns	5.2E+01 ns	1.0E+01 ns	5.2E+01 ns	1.2E+02 ns	2.9E+01 ns	1.6E+01 ns	
Acetylchloride	2.0E-02 l	2.0E-02 r	0 0.10 50394-84-6	1 0.10 75-02-8	2.2E+02 ns	1.2E+03 ns	5.2E+01 ns	5.2E+01 ns	1.0E-01 ns	5.2E+01 ns	1.2E+02 ns	2.9E+01 ns	8.0E+01 ns	
Acrylamide	4.0E+00 l	2.0E-04 l	4.0E-00 l	0 0.10 79-06-1	1 0.10 75-03-8	4.9E-01 ns	1.6E+00 ns	2.1E+00 ns	4.2E+00 ns	1.0E-01 ns	1.5E+03 ca	1.5E+02 ca	7.1E+01 ns	
Acrylic acid	6.0E-03 l	1.4E-02 h	1.4E-02 h	0 0.10 99-86-2	1 0.10 79-10-7	3.1E+04 ns	2.9E+05 ns	1.0E+00 ns	1.8E+04 ns	4.9E-01 ns	4.2E+01 ca	1.5E+02 ca	7.1E+01 ns	
Acrylonitrile	1.0E-01 l	5.7E-00 x	5.7E-00 x	1 0.10 99-86-2	1 0.10 79-13-1	1.9E-01 ca*	4.7E-01 ca*	2.8E+02 ns	2.1E+02 ns	8.5E+02 ns	8.9E+03 ns	4.7E+01 ns	4.7E+02 ns	
Acrylonitrile	1.3E-02 l	1.3E-02 r	0 0.10 50394-84-6	1 0.10 79-13-1	1.0E-01 ns	3.4E-01 ns	2.1E+01 ns	2.1E+02 ns	1.0E-01 ns	3.4E-01 ns	3.4E-01 ns	4.2E+02 ns	8.0E+01 ns	
Acrolein	2.0E-02 h	6.7E-00 l	6.7E-00 l	0 0.10 107-02-8	1 0.10 107-02-8	9.8E-02 ca*	4.2E-01 ca	1.5E+03 ca	1.5E+02 ca	1.0E-01 ns	1.0E+05 ns	1.0E+05 ns	1.0E+05 ns	
Acrylic acid	5.0E-01 l	2.0E-04 l	2.0E-04 l	0 0.10 107-02-8	1 0.10 107-02-8	3.1E+04 ns	1.0E+00 ns	1.8E+04 ns	1.8E+04 ns	4.9E-01 ns	4.2E+01 ca	1.5E+02 ca	7.1E+01 ns	
Acrylic acid	5.5E-01 l	2.4E-01 l	2.4E-01 l	0 0.10 107-02-8	1 0.10 107-02-8	1.9E-01 ca*	4.7E-01 ca*	2.8E+02 ns	2.1E+02 ns	5.5E+00 ca	8.4E+03 ns	8.4E+02 ca	8.4E+01 ca	
Alachlor	6.1E-02 h	1.0E-02 l	6.0E-02 r	0 0.10 157-24-6	1 0.10 157-24-6	5.5E+00 ca	2.4E+01 ca	8.4E+02 ns	8.4E+02 ns	9.8E+03 ns	1.0E+05 ns	5.5E+02 ns	5.5E+03 ns	
Alar	1.5E-01 l	1.5E-01 r	1.5E-01 r	0 0.10 156-84-5	1 0.10 156-84-5	6.5E+01 ns	6.8E+02 ns	3.7E+00 ns	3.7E+01 ns	6.5E+01 ns	6.8E+02 ns	3.7E+00 ns	3.7E+01 ns	
Aldicarb	1.0E-03 l	1.0E-03 r	1 0.10 116-06-3	0 0.10 116-06-3	6.5E+01 ns	6.8E+02 ns	3.7E+00 ns	3.7E+01 ns	6.5E+01 ns	6.8E+02 ns	3.7E+00 ns	3.7E+01 ns	3.7E+01 ns	
Aldicarb sulfone	1.0E-03 l	1.0E-03 r	1 0.10 164-88-4	0 0.10 164-88-4	2.6E-02 ca*	1.1E-01 ca	3.9E-04 ca	3.9E-04 ca	2.6E-02 ca*	1.1E-01 ca	1.0E+05 max	9.1E+02 ns	9.1E+03 ns	
Aldrin	1.7E+01 l	1.7E+01 l	3.0E-05 r	0 0.10 309-00-2	1 0.10 309-00-2	1.6E+04 ns	1.0E+05 max	9.1E+02 ns	9.1E+03 ns	1.0E+04 ns	1.0E+05 max	9.1E+02 ns	9.1E+03 ns	
Allyl alcohol	2.5E-01 l	2.5E-01 r	0 0.10 5585-04-6	1 0.10 5585-04-6	3.2E+02 ns	3.4E+03 ns	1.8E+01 ns	1.8E+02 ns	3.2E+03 ns	3.3E+04 ns	1.0E+00 ns	1.8E+03 ns	1.2E+04 ns	
Allyl chloride	5.0E-03 x	5.0E-03 r	5.0E-03 r	0 0.10 107-18-0	1 0.10 107-18-0	3.2E+03 ns	3.4E+03 ns	1.8E+01 ns	1.8E+02 ns	3.2E+03 ns	3.3E+04 ns	1.0E+00 ns	1.8E+03 ns	
Aluminum	1.0E+00 n	1.0E+00 n	0 0.01 748-90-6	0 0.01 748-90-6	7.7E+04 ns	1.0E+05 max	7.7E+04 ns	1.0E+05 max	7.7E+04 ns	1.0E+05 max	7.7E+04 ns	1.0E+04 ns	3.7E+04 ns	
Aluminum phosphide	4.0E-04 l	4.0E-04 l	0 0.01 20459-73-8	0 0.01 20459-73-8	3.1E+01 nc	6.8E+02 ns	3.1E+01 nc	6.8E+02 ns	2.0E+01 nc	2.0E+02 ns	1.1E+01 nc	1.1E+01 nc	1.5E+01 nc	
Androstenone	3.0E-04 l	3.0E-04 r	0 0.10 67465-28-4	0 0.10 67465-28-4	5.9E+02 ns	6.1E+03 ns	5.9E+02 ns	6.1E+03 ns	3.3E+01 ns	3.3E+01 ns	3.3E+01 ns	3.3E+02 ns	3.3E+02 ns	
Ametryn	9.0E-03 l	9.0E-03 r	0 0.10 83-12-6	0 0.10 83-12-6	4.6E+03 ns	4.8E+04 ns	4.6E+03 ns	4.8E+04 ns	1.3E+00 nc	1.4E+01 nc	2.6E+02 ns	2.6E+02 ns	2.6E+03 ns	
m-Aminophenol	7.0E-02 h	7.0E-02 r	0 0.10 59-127-5	0 0.10 59-127-5	1.6E+02 ns	1.7E+03 ns	1.6E+02 ns	1.7E+03 ns	1.4E+01 nc	1.4E+01 nc	7.3E-02 ns	7.3E-02 ns	7.3E-01 nc	
4-Aminopyridine	2.0E-05 h	2.0E-05 r	0 0.10 50-24-5	0 0.10 50-24-5	1.6E+02 ns	1.7E+03 ns	1.6E+02 ns	1.7E+03 ns	9.1E+00 ns	9.1E+00 ns	9.1E+00 ns	9.1E+00 ns	9.1E+01 ns	
Amikraz	2.5E-03 l	2.6E-03 r	0 0.10 33049-91-1	0 0.10 33049-91-1	1.3E+04 nc	1.0E+05 max	1.3E+04 nc	1.0E+05 max	1.9E+01 nc	2.0E+02 ns	1.0E+02 ns	1.0E+02 ns	7.3E+03 ns	
Ammonia	2.0E-01 l	2.9E-02 l	n/a n/a	7864-41-7	Ammonium sulfamate	3.1E+01 nc	6.8E+02 ns	3.1E+01 nc	6.8E+02 ns	1.9E+01 nc	2.0E+02 ns	1.0E+00 ns	1.1E+01 nc	7.3E+03 ns
Ammonium sulfamate	5.7E+03 l	2.8E-04 r	5.7E+03 r	0 0.10 7773-00-0	Aniline	1.8E+01 nc	6.4E+02 ns	1.8E+01 nc	6.4E+02 ns	3.8E+01 nc	3.8E+01 nc	1.0E+00 ns	1.1E+01 nc	5.0E+00 ns
Anilines and compounds	4.0E-04 l	4.0E-04 r	0 0.01 740-36-0	0 0.01 740-36-0	3.8E+01 nc	8.5E+02 ns	3.8E+01 nc	8.5E+02 ns	1.3E+00 nc	1.3E+00 nc	1.3E+00 nc	1.3E+00 nc	3.0E+01 ns	
Antimony pentoxide	5.0E-04 h	5.0E-04 r	0 0.01 131-00-9	0 0.01 131-00-9	6.9E+01 nc	1.5E+03 ns	6.9E+01 nc	1.5E+03 ns	1.5E+01 nc	1.5E+01 nc	1.5E+01 nc	1.5E+01 nc	3.0E+01 ns	
Antimony potassium tartrate	9.0E-04 h	9.0E-04 r	0 0.01 26300-74-5	0 0.01 26300-74-5	3.1E+01 nc	6.8E+02 ns	3.1E+01 nc	6.8E+02 ns	2.2E+01 nc	2.2E+01 nc	1.5E+01 nc	1.5E+01 nc	3.0E+01 ns	
Antimony telluride	1.0E-04 h	1.0E-04 r	0 0.01 132-81-6	0 0.01 132-81-6	8.6E+02 nc	8.9E+03 ns	1.8E+01 nc	7.6E+01 nc	4.7E+01 nc	4.7E+01 nc	4.7E+01 nc	4.7E+01 nc	4.7E+01 nc	
Antimony trioxide	4.0E-04 h	4.0E-04 r	0 0.01 1308-04-4	0 0.01 1308-04-4	3.8E-01 ca*	2.4E+00 ca	3.8E-01 ca*	2.4E+00 ca	4.5E-04 ca	4.5E-04 ca	4.5E-04 ca	4.5E-04 ca	2.9E+01 ns	
Apollo	1.3E-02 l	1.3E-02 r	0 0.10 74115-24-5	0 0.10 74115-24-5	5.9E+02 nc	6.1E+03 ns	5.9E+02 nc	6.1E+03 ns	3.3E+03 nc	3.4E+04 ns	3.3E+02 nc	3.3E+03 nc	3.3E+02 nc	
Aramite	2.5E-02 l	2.5E-02 h	5.0E-02 r	0 0.10 140-37-4	Avermectin B1	2.0E+00 ca	8.6E+00 ca	2.0E+00 ca	8.6E+00 ca	2.7E+02 ns	3.1E+02 ns	2.7E+02 ns	3.0E+01 ns	3.0E+01 ns
Arsenic (noncancer endpoint)	3.0E-04 l	3.0E-04 r	0 0.03 7440-38-2	0 0.03 7440-38-2	4.0E+01 ns	6.2E+02 ns	4.0E+01 ns	6.2E+02 ns	1.7E+01 nc	1.7E+01 nc	6.2E+02 ns	6.2E+02 ns	6.2E+02 ns	
Arsenic (cancer endpoint)	1.5E+00 l	1.5E+00 r	1.5E+01 l	0 0.03 7440-38-2	3.8E-01 ca*	2.4E+00 ca	3.8E-01 ca*	2.4E+00 ca	4.5E-04 ca	4.5E-04 ca	4.5E-04 ca	4.5E-04 ca	1.0E+00 ns	
Arsine	9.0E-03 l	9.0E-03 r	0 0.10 76578-12-8	0 0.10 76578-12-8	5.9E+02 nc	6.1E+03 ns	5.9E+02 nc	6.1E+03 ns	3.3E+03 nc	3.4E+04 ns	3.3E+02 nc	3.3E+03 nc	3.3E+02 nc	
Asuram	5.0E-02 l	5.0E-02 r	5.0E-02 r	0 0.10 3337-71-1	Asulam	2.0E+00 ca	8.6E+00 ca	2.0E+00 ca	8.6E+00 ca	3.1E+02 ns	3.1E+02 ns	3.1E+02 ns	3.1E+02 ns	1.8E+03 ns
Atrazine	3.5E-02 h	3.5E-02 h	2.2E-01 r	3.5E-02 h	0 0.10 1912-24-9	2.6E+01 nc	2.7E+02 ns	2.6E+01 nc	2.7E+02 ns	1.7E+01 nc	1.7E+01 nc	1.7E+01 nc	1.7E+01 nc	3.0E+01 ns
Avermectin B1	4.0E-04 l	4.0E-04 r	4.0E-04 r	0 0.10 71751-41-2	Azobenzene	4.0E+01 nc	1.5E+00 nc	4.0E+01 nc	1.5E+00 nc	6.2E-02 ns	6.2E-02 ns	6.2E-02 ns	6.2E-02 ns	6.2E+01 ns
Azobenzene	7.0E-02 l	7.0E-02 l	1.1E-01 l	1.1E-01 l	Barium and compounds	5.3E+03 ns	1.0E+05 max	5.3E+03 ns	1.0E+05 max	2.7E+03 ns	5.2E+01 ns	2.7E+03 ns	2.7E+03 ns	1.5E+02 ns
Baygon	4.0E-03 l	4.0E-03 r	0 0.10 114-26-1	0 0.10 114-26-1	2.6E+02 ns	2.7E+03 ns	2.6E+02 ns	2.7E+03 ns	1.5E+01 ns	1.5E+01 ns	1.5E+01 ns	1.5E+01 ns	1.5E+02 ns	

Key: lHRS: least withdrawn route extrapolation; cHRS: cancer route extrapolation; nC: noncancer route extrapolation; ca: cancer endpoint; nc: noncancer endpoint; where: ne < 100x ca; **where: nc < 10x ca

FOR PLANNING PURPOSES

TOXICOLOGY

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TOXICITY INFORMATION										PRELIMINARY REMEDIAL GOALS (PRGS)										SOIL SCREENING LEVELS															
Contaminant	Vw/vn			Soil			Soil			Residential			Industrial			Ambient Air			Top Water			Ground Water			Soil			Soil							
	SF _o	RDo _o	SF _f	RD _f	Soil _o	Soil _f	Soil _g	Soil _d	Soil _h	Soil _j	Soil _k	Soil _l	Soil _m	Soil _n	Soil _o	Soil _p	Soil _q	Soil _r	Soil _s	Soil _t	Soil _u	Soil _v	Soil _w	Soil _x	Soil _y	Soil _z	Soil _a	Soil _b	Soil _c						
Carbosulfan	1.0E-02	1.0E-02	0	0.10	65265-14-8					6.5E-02	nc	6.8E+03	nc	3.7E+01	nc	3.7E+02	nc	3.7E+03	nc	3.7E+01	nc	3.7E+02	nc	3.7E+03	nc	3.7E+01	nc	3.7E+02	nc	3.7E+03	nc				
Carboxin	1.0E-01	1.0E-01	0	0.10	5234-68-4					6.5E-03	nc	6.8E+04	nc	3.7E+02	nc	7.3E+00	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+01	nc				
Chloral	2.0E-03	2.0E-03	0	0.10	302-17-0					1.3E-02	nc	1.4E+03	nc	5.5E+01	nc	5.5E+01	nc	5.5E+02	nc	5.5E+02	nc	5.5E+03	nc	5.5E+02	nc	5.5E+03	nc	5.5E+02	nc	5.5E+03	nc				
Chloramben	1.5E-02	1.5E-02	0	0.10	133-80-4					9.8E-02	nc	1.0E+04	nc	4.7E+00	ca	1.7E-02	ca	1.7E-01	ca	1.7E-01	ca	1.7E-02	ca	1.7E-01	ca	1.7E-02	ca	1.7E-01	ca	1.7E-02	ca	1.7E-01	ca		
Chloranil	4.0E-01	4.0E-01	0	0.10	118-75-2					1.1E-00	ca	1.5E+00	ca	3.4E-01	ca*	5.2E-03	ca*	5.2E-02	ca*	5.2E-03	ca*	5.2E-02	ca*	5.2E-03	ca*	5.2E-02	ca*	5.2E-03	ca*	5.2E-02	ca*	5.2E-03	ca*		
Chlordane	1.3E-00	1.3E-00	0	0.10	67-74-9					1.3E-03	nc	1.4E+04	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+04	nc	7.3E+05	nc	7.3E+04	nc	7.3E+05	nc	7.3E+04	nc		
Chlorimuron-ethyl	2.0E-02	2.0E-02	0	0.10	80692-32-4					7.7E+03	nc	7.7E+03	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc		
Chlorine	1.0E-01	1.0E-01	0	0.01	7782-50-5					7.7E+04	nc	7.7E+04	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc	2.1E-01	nc		
Chlorine dioxide	6.7E-05	6.7E-05	n/a	n/a	10049-04-4					1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca	1.0E-00	ca		
Chloroacetaldehyde	2.0E-03	2.0E-03	0	0.10	107-20-0					1.3E+02	nc	1.4E+03	nc	7.3E+00	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+06	nc	7.3E+07	nc	7.3E+08	nc	7.3E+09	nc		
Chloroacetic acid	8.6E-06	8.6E-06	0	0.10	78-11-8					3.2E-02	nc	1.1E-01	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc	3.1E-02	nc		
2-Chloroacephenone	6.6E-09	6.6E-09	1	0.10	532-27-4					2.6E+02	nc	2.7E+03	nc	6.5E+01	nc	2.2E+02	nc	2.1E+01	nc	3.9E+01	nc	1.0E+00	ca	1.0E+00	ca	1.0E+00	ca	1.0E+00	ca	1.0E+00	ca	1.0E+00	ca		
4-Chloroaniline	4.0E-03	4.0E-03	0	0.10	100-47-8					1.6E+00	ca	7.1E+00	ca	2.5E-02	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca	2.5E-01	ca		
Chlorobenzale	2.0E-02	2.0E-02	0	0.10	108-90-7					1.3E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+06	nc	7.3E+07	nc	7.3E+08	nc	7.3E+09	nc	7.3E+010	nc				
p-Chlorobenzoic acid	2.0E-01	2.0E-01	0	0.10	74-11-3					1.3E+03	nc	1.4E+04	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+06	nc	7.3E+07	nc	7.3E+08	nc	7.3E+09	nc				
4-Chlorobenzotrifluoride	2.0E-02	2.0E-02	0	0.10	98-58-6					3.6E+00	nc	1.2E+01	nc	7.3E+00	nc	7.3E+01	nc	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+06	nc	7.3E+07	nc	7.3E+08	nc	7.3E+09	nc		
2-Chloro-1,3-butadiene	2.0E-02	2.0E-02	0	0.10	126-99-8					4.8E+02	sat	4.8E+02	sat	1.5E+03	nc	2.4E+03	nc	2.4E+04	nc	2.4E+05	nc	2.4E+06	nc	2.4E+07	nc	2.4E+08	nc	2.4E+09	nc	2.4E+010	nc				
1-Chlorobutane	4.0E-01	4.0E-01	0	0.10	109-49-3					3.4E+02	sat	3.4E+02	sat	5.2E+02	sat	5.2E+03	nc	5.2E+04	nc	5.2E+05	nc	5.2E+06	nc	5.2E+07	nc	5.2E+08	nc	5.2E+09	nc	5.2E+010	nc				
1-Chloro-1,1-difluoroethane (HCFC-142b)	1.4E+01	1.4E+01	1	0.10	75-06-3					3.4E+02	sat	3.4E+02	sat	5.1E+04	nc	8.5E+04	nc	8.5E+05	nc	8.5E+06	nc	8.5E+07	nc	8.5E+08	nc	8.5E+09	nc	8.5E+10	nc	8.5E+11	nc				
2-Chloroethyl vinyl ether	1.0E-01	1.0E-01	1	0.10	110-75-6					2.5E-01	ca	5.3E-01	ca	8.4E-02	ca	1.1E+00	ca	1.5E+00	ca	1.5E+01	ca	1.5E+02	ca	1.5E+03	ca	1.5E+04	ca	1.5E+05	ca	1.5E+06	ca	1.5E+07	ca		
Chlorodifluoromethane	6.1E-03	6.1E-03	0	0.10	75-16-4					1.2E+00	ca	2.6E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca	1.1E+00	ca		
Chloroform	1.3E-02	1.3E-02	0	0.10	67-00-3					9.7E-01	ca	3.3E+00	ca	1.2E-02	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca	1.2E-01	ca		
Chloromethane	5.6E-01	5.6E-01	0	0.10	74-47-3					1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat	1.1E+02	sat		
4-Chloro-2-methylaniline	4.0E-01	4.0E-01	0	0.10	91-58-7					1.8E+01	ca	7.6E+01	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca	2.7E+00	ca		
beta-Chloronaphthalene	2.5E-02	2.5E-02	0	0.10	85-73-3					1.3E+04	nc	1.0E+05	max	7.3E+02	nc	7.3E+03	nc	7.3E+04	nc	7.3E+05	nc	7.3E+06	nc	7.3E+07	nc	7.3E+08	nc	7.3E+09	nc	7.3E+10	nc				
o-Chloronirobenzene	1.6E-02	1.6E-02	0	0.10	101-21-3					2.0E+02	nc	2.0E+03	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc	1.1E+01	nc		
p-Chloronirobenzene	3.0E-03	3.0E-03	0	0.10	282-86-2					6.6E+02	nc	6.6E+03	nc	3.7E+01	nc	3.7E+01	nc	3.7E+02	nc	3.7E+03	nc	3.7E+04	nc	3.7E+05	nc	3.7E+06	nc	3.7E+07	nc	3.7E+08	nc	3.7E+09	nc		
Chloropylios-methyl	1.0E-02	1.0E-02	0	0.10	6598-13-0					3.3E+03	nc	3.4E+04	nc	1.8E+02	nc	1.8E+02	nc	1.8E+03	nc	1.8E+04	nc	1.8E+05	nc	1.8E+06	nc	1.8E+07	nc	1.8E+08	nc	1.8E+09	nc				
Chlorsulfuron	5.0E-02	5.0E-02	0	0.10	64692-72-3					5.2E+01	nc	5.5E+02	nc	2.9E+00	nc	2.9E+01	nc	2.9E+02	nc	2.9E+03	nc	2.9E+04	nc	2.9E+05	nc	2.9E+06	nc	2.9E+07	nc	2.9E+08	nc				
Chlorthiophos	8.0E-04	8.0E-04	0	0.10	602-38-56-4					2.1E+02	ca	4.5E+02	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca	1.6E-04	ca		
Total Chromium (1/6 ratio Cr VI/Cr III)	4.2E+01	4.2E+01	0	0.01	n/a					3.0E+01	ca	6.4E+01	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca	2.3E-05	ca		
Chromium VI	5.0E-03	5.0E-03	0	0.01	7440-47-3					"CAL-Modified PRG" (PEA, 1994)		2.0E-01		4.6E+03	nc	9.7E+04	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc	1.0E+00	nc
Cobalt	6.0E-02	6.0E-02	0	0.01	7440-48-4					2.0E+00	ca	2.0E+00	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca	3.1E-03	ca		
Coke Oven Emissions	3.7E-02	3.7E-02	0	0.01	8007-46-2					2.8E+03	nc	6.3E+04	nc	3.7E+01	nc	3.7E+01	nc	3.7E+02	nc	3.7E+03	nc	3.7E+04	nc	3.7E+05	nc	3.7E+06	nc	3.7E+07	nc	3.7E+08	nc	3.7E+09	nc		
Copper and compounds	1.9E-00	1.9E-00	0	0.01	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca	1.0E-02	ca			
Crotonaldehyde	4.0E-01	4.0E-01	0	0.01	7440-50-8					5.3E-03	ca	6.2E+01	ca	9.4E-01	ca	9.4E+00	ca	9.4E+01	ca	9.4E+02	ca	9.4E+03	ca	9.4E+04	ca	9.4E+05	ca	9.4E+06	ca	9.4E+07	ca	9.4E+08	ca		
Cyanine	4.0E-01	4.0E-01	0	0.01	7440-52-9					5.3E-01	ca	6.2E																							

Key: PRIS = PRECISE WITHDRAWN ROUTE EXTRAPOLATION OF CANCER PROTECTION FACTOR (also see DILUTED) • where: ne < 100X ea) --> where: ne < 10X ea)

FOR PLANNING PURPOSES

TOXICITY INFORMATION

PRELIMINARY REMEDIAL GOALS (PRGS)										SOIL SCREENING LEVELS			
CONTAMINANT		VSLn O abs. C soils		CAS No.		Residential Soil (mg/kg)		Industrial Soil (mg/kg)		Residential Soil (mg/kg)		Industrial Soil (mg/kg)	
SFO 1/(mg/kg-d) (mg/kg-d)	RfD 1/(mg/kg-d)	SFI 1/(mg/kg-d)	RD _o 1.0E-02 h	1.0E-02 r	1.0E-02 r	1.0E-01 158-36-2	1.2-Dichloroethylene (cis)	3.1E+01 nc	3.7E+01 nc	6.1E+01 nc	6.1E+01 nc	4.0E-01 2.0E-02	7.0E-01 3.0E-02
2.0E-02 l	2.0E-02 r	2.0E-02 r	2.0E-02 h	2.0E-02 r	2.0E-02 r	1.0E-01 150-90-5	1,2-Dichloroethylene (trans)	7.8E+01 nc	7.3E+01 nc	1.2E+02 nc	7.3E+01 nc	4.0E-01 2.0E-02	7.0E-01 3.0E-02
9.0E-03 h	9.0E-03 r	9.0E-03 r	3.0E-03 r	3.0E-03 r	3.0E-03 r	5.0-58-0	1,2-Dichloroethylene (mixture)	3.5E+01 nc	1.2E+02 nc	3.3E+01 nc	5.5E+01 nc	5.5E+01 nc	5.5E+01 nc
3.0E-03 l	3.0E-03 r	3.0E-03 r	3.0E-03 r	3.0E-03 r	3.0E-03 r	120-63-2	2,4-Dichlorophenol	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc	1.1E+01 nc	1.1E+02 nc
6.0E-03 l	6.0E-03 r	6.0E-03 r	6.0E-03 r	6.0E-03 r	6.0E-03 r	94-92-6	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	5.2E+02 nc	5.5E+03 nc	2.9E+01 nc	2.9E+02 nc	2.9E+01 nc	2.9E+02 nc
1.0E-02 l	1.0E-02 r	1.0E-02 r	1.0E-02 r	1.0E-02 r	1.0E-02 r	94-75-7	2,4-Dichlorophenoxyacetic Acid (2,4-D)	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc	3.7E+01 nc	3.7E+02 nc
6.0E-02 h	6.0E-02 r	6.0E-02 r	1.1E-03 l	1.1E-03 l	1.1E-03 l	1.0E-01 76-87-5	1,2-Dichloropropane	3.1E-01 ca*	6.8E-01 ca*	9.9E-02 ca*	1.6E-01 ca*	1.6E-01 ca*	1.6E-01 ca*
1.0E-01 h	1.0E-01 r	1.0E-01 r	1.3E-01 h	1.3E-01 h	1.3E-01 h	5.7E-03 l	1.0E-01 542-75-4	2.5E-01 ca*	5.5E-01 ca*	5.2E-02 ca	8.1E-02 ca	8.1E-02 ca	8.1E-02 ca
5.0E-01 l	5.0E-01 r	5.0E-01 r	3.0E-03 r	3.0E-03 r	3.0E-03 r	0.10 616-23-9	2,3-Dichloropropanol	2.0E+02 nc	2.0E+03 nc	1.1E+01 nc	1.1E+02 nc	1.1E+01 nc	1.1E+02 nc
2.0E-01 l	2.0E-01 r	2.0E-01 r	4.4E-01 r	4.4E-01 r	4.4E-01 r	0.10 115-22-2	Diclofol	1.5E+00 ca**	6.6E+00 ca**	2.3E-02 ca*	2.3E-01 ca*	2.3E-01 ca*	2.3E-01 ca*
1.4E-01 x	3.0E-02 h	5.7E-05 h	1.0E-01 77-72-8	Dicyclopentadiene	1.0E+00 ca	4.3E+00 ca	1.5E-02 ca	1.5E+00 ca	1.5E-02 ca	1.5E-01 ca	1.5E-01 ca	1.5E-01 ca	1.5E-01 ca
1.0E-01 l	5.0E-01 l	1.0E-01 l	6.0E-05 r	6.0E-05 r	6.0E-05 r	0.10 60-57-1	Dieldrin	2.8E-02 ca*	1.2E-01 ca	4.2E-01 ca	4.2E-03 ca	4.2E-03 ca	4.0E-03 2.0E-04
5.7E-03 h	5.7E-03 r	5.7E-03 r	5.7E-03 x	5.7E-03 x	5.7E-03 x	0.10 112-34-5	Dieethylene glycol, monoethyl ether	3.7E+02 nc	3.9E+03 nc	2.1E+01 nc	2.1E+02 nc	2.1E+01 nc	2.1E+02 nc
2.0E+00 h	2.0E+00 r	2.0E+00 r	2.0E+00 r	2.0E+00 r	2.0E+00 r	0.10 111-80-0	Diethylene glycol, monoethyl ether	1.0E+05 max	1.0E+05 max	7.3E+03 nc	7.3E+04 nc	7.3E+03 nc	7.3E+04 nc
1.1E-02 h	1.1E-02 h	1.1E-02 h	1.1E-02 r	1.1E-02 r	1.1E-02 r	0.10 617-44-5	Diethylformamide	7.2E+02 nc	7.5E+03 nc	4.0E+01 nc	4.0E+02 nc	4.0E+01 nc	4.0E+02 nc
1.2E-01 l	1.2E-01 l	1.2E-01 l	1.2E-35 r	1.2E-35 r	1.2E-35 r	0.10 103-23-1	Di(2-ethylhexyl)adipate	5.7E+02 nc	5.6E+03 nc	5.6E+00 nc	5.6E+01 nc	5.6E+00 nc	5.6E+01 nc
6.0E-01 l	6.0E-01 l	6.0E-01 l	6.0E-01 r	6.0E-01 r	6.0E-01 r	0.10 84-06-2	Diethyl phthalate	1.0E+04 nc	1.0E+05 max	2.9E+03 nc	2.9E+04 nc	2.9E+03 nc	2.9E+04 nc
4.7E+03 h	4.7E+03 r	4.7E+03 r	4.7E+03 r	4.7E+03 r	4.7E+03 r	0.10 56-53-1	Diethylstilbestrol	9.5E+05 ca	4.1E-04 ca	1.4E-06 ca	1.4E-05 ca	1.4E-06 ca	1.4E-05 ca
0.0E-02 l	0.0E-02 l	0.0E-02 l	0.0E-02 r	0.0E-02 r	0.0E-02 r	0.10 4322-48-0	Diflanoquat (Avenge)	5.2E+03 nc	5.5E+04 nc	2.9E+02 nc	2.9E+03 nc	2.9E+02 nc	2.9E+03 nc
2.0E-02 l	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	0.10 35397-34-5	Diflubenzuron	1.3E+03 nc	1.4E+04 nc	7.3E+01 nc	7.3E+02 nc	7.3E+01 nc	7.3E+02 nc
1.1E-01 r	1.1E-01 r	1.1E-01 r	1.1E+01 l	1.1E+01 l	1.1E+01 l	1.0 75-37-8	1,1-Difluoroethane	5.2E+03 nc	5.5E+04 nc	4.2E+04 nc	6.9E+04 nc	6.9E+04 nc	6.9E+04 nc
6.0E-02 l	6.0E-02 l	6.0E-02 l	8.0E-02 r	8.0E-02 r	8.0E-02 r	0.10 144-75-4	Disopropyl methylphosphonate	1.3E+03 nc	1.4E+04 nc	2.9E+02 nc	2.9E+03 nc	2.9E+02 nc	2.9E+03 nc
2.0E-02 l	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	0.10 55380-34-7	Dinaphthipin	1.3E+01 nc	1.4E+02 nc	7.3E+01 nc	7.3E+02 nc	7.3E+01 nc	7.3E+02 nc
1.4E-04 l	2.0E-04 r	2.0E-04 r	2.0E-04 r	2.0E-04 r	2.0E-04 r	0.10 60-51-5	Dimethoate	3.2E+01 nc	1.4E+02 nc	4.8E-01 nc	4.8E+00 nc	4.8E-01 nc	4.8E+00 nc
1.4E-02 h	1.4E-02 r	1.4E-02 r	5.7E-06 x	5.7E-06 x	5.7E-06 x	1.0 121-03-3	3,3'-Dimethylbenzidine	6.5E-02 nc	2.4E-01 nc	2.1E-02 nc	3.5E+02 nc	3.5E+02 nc	3.5E+02 nc
2.0E-03 l	2.0E-03 r	2.0E-03 r	2.0E-03 r	2.0E-03 r	2.0E-03 r	0.10 121-69-7	N,N-Dimethylbenziline	1.3E+02 nc	1.4E-03 nc	7.3E+00 nc	7.3E+01 nc	7.3E+00 nc	7.3E+01 nc
7.5E-01 h	7.5E-01 r	7.5E-01 r	5.8E-01 r	5.8E-01 r	5.8E-01 r	0.10 95-68-1	2,4-Dimethylaniline	5.9E-01 ca	2.5E+00 nc	9.0E-03 ca	9.0E-02 ca	9.0E-03 ca	9.0E-02 ca
5.6E-01 h	9.2E-00 h	9.2E-00 h	3.5E+00 x	3.5E+00 x	3.5E+00 x	0.10 119-35-7	2,4-Dimethylbenzidine hydrochloride	7.7E-01 ca	3.3E+00 nc	1.2E-02 ca	1.2E-01 ca	1.2E-02 ca	1.2E-01 ca
2.0E-00 x	3.7E-01 x	3.7E-01 x	1.0E-01 l	1.0E-01 l	1.0E-01 l	0.10 67-14-7	3,3'-Dimethylbenzidine	4.8E-02 ca	2.1E-01 ca	7.3E-04 ca	7.3E-03 ca	7.3E-04 ca	7.3E-03 ca
1.0E-01 h	1.0E-01 h	1.0E-01 h	8.0E-03 l	8.0E-03 l	8.0E-03 l	0.10 540-73-8	1,1-Dimethylhydrazine	1.2E-02 nc	1.7E-01 ca	7.3E-04 ca	7.3E-03 ca	7.3E-04 ca	7.3E-03 ca
2.0E-02 l	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	2.0E-02 r	0.10 105-07-9	2,4-Dimethylphenol	1.3E+03 nc	3.8E+01 nc	4.1E+04 nc	7.3E+01 nc	7.3E+02 nc	7.3E+01 nc
6.0E-04 l	6.0E-04 r	6.0E-04 r	1.0E-04 r	1.0E-04 r	1.0E-04 r	0.10 570-26-1	2,6-Dimethylphenol	6.5E+01 nc	6.8E+02 nc	2.2E+00 nc	2.2E+01 nc	2.2E+00 nc	2.2E+01 nc
1.0E-03 l	1.0E-03 r	1.0E-03 r	1.0E+01 r	1.0E+01 r	1.0E+01 r	0.10 95-65-8	3,4-Dimethylphenol	1.0E+05 max	1.0E+05 max	3.7E+00 nc	3.7E+01 nc	3.7E+00 nc	3.7E+01 nc
1.0E+01 h	1.0E+01 h	1.0E+01 h	1.0E-01 r	1.0E-01 r	1.0E-01 r	0.10 131-11-3	Dimethyl phthalate	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc	3.7E+02 nc	3.7E+03 nc
4.0E-04 h	4.0E-04 h	4.0E-04 h	4.0E-04 r	4.0E-04 r	4.0E-04 r	0.10 100-25-4	Dimethyl terephthalate	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc	7.3E+00 nc	7.3E+01 nc
2.0E-03 l	2.0E-03 r	2.0E-03 r	2.0E-03 r	2.0E-03 r	2.0E-03 r	0.10 51-25-5	4,6-Dinitro-o-cyclohexyl phenol	1.3E+02 nc	6.5E+00 nc	6.8E+01 nc	6.8E+02 nc	6.8E+01 nc	6.8E+02 nc
1.0E-04 l	1.0E-04 l	1.0E-04 l	1.0E-04 r	1.0E-04 r	1.0E-04 r	0.10 99-35-0	1,3-Dinitrobenzene	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc	1.5E+00 nc	1.5E+01 nc
4.0E-04 h	4.0E-04 h	4.0E-04 h	4.0E-04 r	4.0E-04 r	4.0E-04 r	0.10 520-28-0	1,2-Dinitrobenzene	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc	1.5E+00 nc	1.5E+01 nc
1.0E-04 h	4.0E-04 h	4.0E-04 h	1.0E-04 r	1.0E-04 r	1.0E-04 r	0.10 121-14-2	2,4-Dinitrobenzene	2.6E+01 nc	2.7E+02 nc	1.5E+00 nc	1.5E+01 nc	1.5E+00 nc	1.5E+01 nc
0.8E-01 l	0.8E-01 l	0.8E-01 l	0.8E-01 r	0.8E-01 r	0.8E-01 r	0.10 2521-14-0	Dinitrotoluene mixture	6.5E-01 ca	2.8E+00 nc	9.9E-03 ca	9.9E-02 ca	8.0E-04 ca	8.0E-03 ca
2.0E-03 l	2.0E-03 r	2.0E-03 r	1.0E-03 h	1.0E-03 h	1.0E-03 h	0.10 600-20-2	Dinitrotoluene mixture (also see Dinitrodiolene mixture)	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc	7.3E+00 nc	7.3E+01 nc
1.0E-03 h	1.0E-03 h	1.0E-03 h	1.0E-03 h	1.0E-03 h	1.0E-03 h	0.10 600-20-2	Dinitrodiolene mixture (also see Dinitrotoluene mixture)	6.5E-01 ca	3.7E+00 nc	3.7E+01 nc	3.7E+02 nc	3.7E+01 nc	3.7E+02 nc

FOR PLANNING PURPOSES

TOXICITY INFORMATION

Contaminant	Preliminary Remediation Purposes			Soil Screening Levels		
	SFI RfDo (mg/kg-d) /mg(Ag-d) /mg(Ag-d)	SVI RfDo (mg/kg-d) /mg(Ag-d)	CAS No. C. Sols.	Individual Soil (mg/kg)	Ambient Air Upwind (mg/m ³)	Upwind Water (ug/L)
Fomesafen	0.0 0.10	7217-02-0		2.3E+00 ca	1.0E+01 ca	3.5E-01 ca
Fonios	0.0 0.10	844-32-9		1.3E+02 nc	1.4E+03 nc	7.3E+01 nc
Formaldehyde	0.0 0.10	50-00-0		9.0E+03 nc	1.0E+05 nc	5.5E+03 nc
Formic Acid	0.0 0.10	64-18-4		1.0E+05 max	1.0E+05 max	7.3E+04 nc
Fosetyl-al	0.0 0.10	39148-24-0		1.0E+05 max	1.0E+05 max	1.1E+05 nc
Furan	0.0 0.10	110-00-9		2.5E+00 nc	8.5E+00 nc	6.1E+00 nc
Furazolidone	0.0 0.10	67-45-6		1.2E-01 ca	1.8E-03 ca	1.8E-02 ca
Furfural	0.0 0.10	94-01-1		2.0E+02 nc	2.0E+03 nc	1.1E+02 nc
Furium	0.0 0.10	531-92-8		8.9E-03 ca	3.8E-02 ca	1.3E-03 ca
Fumigoclox	0.0 0.10	60586-05-0		1.5E+01 ca	6.4E+01 ca	2.2E+00 ca
Glufosinate-ammonium	0.0 0.10	77162-82-2		2.6E+01 nc	2.7E+02 nc	1.5E+01 nc
Glycidaldehyde	0.0 0.10	765-34-1		6.5E+03 nc	6.8E+04 nc	3.7E+03 nc
Glyphosate	0.0 0.10	107-13-6		3.0E+00 nc	3.4E+01 nc	1.8E+00 nc
Haloxypoph-methyl	0.0 0.10	69868-40-2		8.5E+02 nc	8.9E+03 nc	4.7E+02 nc
Harmony	0.0 0.10	78277-27-3		9.9E-02 ca	4.2E-01 ca	1.5E-02 ca
Heptachlor	0.0 0.10	78-44-6		4.9E-02 ca	2.1E-01 ca*	7.4E-03 ca*
Heptachlor epoxide	0.0 0.10	102-57-3		1.3E-02 nc	1.4E+03 nc	7.3E+01 nc
Hexabromobenzene	0.0 0.10	97-32-1		2.8E-01 ca*	1.2E+00 ca	4.2E-03 ca
Heptachlorobenzene	0.0 0.10	118-74-1		5.7E+00 ca	2.4E+01 ca*	8.7E-02 ca*
Hexachlorobutadiene	0.0 0.10	87-58-3		7.1E-02 ca	3.0E-01 ca	1.1E-02 ca
Hexachloroethane	0.0 0.10	119-94-6	HCH (alpha)	2.5E-01 ca	1.1E+00 ca	4.2E-02 ca
HHC (beta)	0.0 0.10	319-85-7	HCH (gamma) Lindane	3.4E-01 ca*	1.5E+00 ca	8.6E-01 ca*
HCH (gamma)	0.0 0.10	58-98-9	HCH-technical	2.5E-01 ca	1.1E+00 ca	3.8E-03 ca
Hexamethylcyclotriphosphazene	0.0 0.10	58-99-9		4.6E+02 nc	4.6E+03 nc	2.6E+02 nc
Hexachlorocyclopentadiene	0.0 0.10	77-47-4		7.2E-05 ca	3.1E-04 ca	1.5E-06 ca
Hexachlorobenzene-p-dioxin mixture (HxCDD)	0.0 0.10	19-08-74-3		3.2E+01 ca*	1.4E+02 ca*	4.8E+00 ca**
Hexachloroethane	0.0 0.10	67-77-1		2.0E+01 nc	2.0E+02 nc	5.2E-02 ca
Hexachlorophosphate	0.0 0.10	70-30-4		4.0E+00 ca*	1.7E+01 ca	3.7E-02 ca
Hexahydro-1,3,5-trinitro-1,3,5-triazine	0.0 0.10	12-12-4		4.6E+02 nc	7.3E-02 nc	2.6E+02 nc
Hydrogen chloride	0.0 0.10	302-01-2		7.1E-05 ca	2.1E+02 sat	3.5E+02 nc
n-Hexane	0.0 0.10	82-08-0		1.1E+02 sat	1.1E+00 nc	1.1E+01 nc
Hexazinone	0.0 0.10	5125-04-2		2.2E+03 nc	2.2E+04 nc	1.2E+03 nc
Hydrazine, hydrazine sulfate	0.0 0.10	34734-19-7		1.5E-01 ca	6.4E-01 ca	2.2E-02 ca
Hydrogen sulfide	0.0 0.10	77-03-0		2.6E+03 nc	3.9E-04 ca	2.2E-01 nc
p-Hydroquinone	0.0 0.10	123-31-9		1.6E+04 nc	1.0E+05 max	9.1E+03 nc
Imazalil	0.0 0.10	53554-44-0		2.6E+03 nc	2.7E+04 nc	1.5E+03 nc
Imazaquin	0.0 0.10	81355-37-7		1.1E+04 nc	1.0E+05 max	7.1E+03 nc
Iprodione	0.0 0.10	34734-19-7		1.1E+04 nc	1.0E+05 max	1.1E+03 nc
Isobutanol	0.0 0.10	76-33-1		4.7E+02 ca*	2.0E+03 ca*	7.1E+01 nc
Isophorone	0.0 0.10	76-39-1		9.0E+02 nc	1.0E+04 nc	5.5E+02 nc
Isopropalin	0.0 0.10	33820-53-0		1.6E+04 nc	1.0E+05 max	9.1E+03 nc
Propiconazole	0.0 0.10	81355-37-7		6.5E+03 nc	4.0E+02 nc	3.7E+03 nc
Propiconazole	0.0 0.10	81355-37-7		3.3E-03 nc	3.4E+04 nc	1.8E+03 nc
Propiconazole	0.0 0.10	81355-37-7		2.5E-02 ca	1.1E-01 ca	3.7E-03 ca
Kepone	0.0 0.10	13-50-0		1.3E+02 nc	1.4E+03 nc	7.3E+01 nc
Lactofen	0.0 0.10	77501-63-4		1.3E+03 nc	1.4E+03 nc	7.3E+00 nc

FOR PLANNING PURPOSES

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CONTAMINANT	PRELIMINARY REMEDIAL GOALS ^s (PRGS)				SOIL SCREENING LEVELS			
	SF _o (mg/kg-d) RfD _o (mg/kg-d)	SF _i (mg/kg-d) RfD _i (mg/kg-d)	V _{skin} O _{abs} C soils	CAS No.	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m ³)	Tap Water (ug/L)
Methyl hydrazine	0.1E+00 h	0.1E+00 r	0.10	60-34-4	4.0E-01 ca	1.7E+00 ca	6.1E-03 ca	6.1E-02 ca
Methyl isobutyl ketone	8.0E-02 h	2.3E-02 h	1.10	108-10-1	7.6E-02 nc	2.8E+03 nc	8.3E+01 nc	1.6E+02 nc
Methyl methacrylate	8.0E-02 h	8.0E-02 r	1.10	80-62-6	1.3E+01 ca	5.8E+01 ca	2.0E+02 nc	4.9E+02 nc
2-Methyl-5-nitroaniline	3.3E-02 h	3.3E-02 r	0.10	89-55-6	1.6E+01 nc	1.7E+02 nc	9.1E-01 nc	2.0E+00 ca
Methyl parathion	2.5E-04 l	2.5E-04 r	0.10	284-00-0	3.3E+03 nc	3.4E+04 nc	1.8E+02 nc	9.1E+00 nc
2-Methylphenol	5.0E-02 x	5.0E-02 r	0.10	95-61-7	3.3E+03 nc	3.4E+04 nc	1.8E+03 nc	1.5E+01
3-Methylphenol	5.0E-02 x	5.0E-02 r	0.10	108-31-4	3.3E+02 nc	3.4E+04 nc	1.8E+02 nc	8.0E-01
4-Methylphenol	5.0E-03 h	5.0E-03 r	0.10	104-44-5	3.4E+03 nc	3.4E+03 nc	1.8E+01 nc	1.8E+02 nc
Methyl styrene (mixture)	6.0E-03 h	1.1E-02 h	1.10	25013-15-4	1.2E+02 nc	5.2E+02 nc	4.2E+01 nc	6.0E+01 nc
Methyl styrene (alpha)	7.0E-02 h	7.0E-02 r	1.10	98-33-9	6.8E+02 nc	6.8E+02 nc	2.6E+02 nc	4.3E+02 nc
Methyl tertiobutyl ether (MTBE)	5.0E-03 h	5.0E-03 r	1.10	1834-0-4	3.1E+02 nc	3.1E+03 nc	1.8E+02 nc	1.8E+03 nc
Meloxiclor (Dual)	1.5E-01 l	1.5E-01 r	0.10	51214-45-2	9.8E+03 nc	1.0E+05 max	5.5E+02 nc	5.5E+03 nc
Melribuzin	2.5E-02 l	2.5E-02 r	0.10	21087-04-9	1.6E+03 nc	1.7E+04 nc	9.1E+01 nc	9.1E+02 nc
Mirax	1.8E-00 h	1.8E-00 r	0.10	2485-65-6	2.5E-01 ca*	1.1E+00 ca	3.7E-03 nc	3.7E-02 nc
Mollisate	2.0E-03 l	2.0E-03 r	0.10	22124-71-1	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc
Molybdenum	5.0E-03 h	5.0E-03 r	0.01	7439-98-7	3.8E+02 nc	8.5E+03 nc	6.8E+03 nc	1.8E+02 nc
Monochloramine	1.0E-01 h	1.0E-01 r	0.10	10598-90-3	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc
Naled	2.0E-03 l	2.0E-03 r	0.10	300-76-5	1.3E+02 nc	1.4E+03 nc	7.3E+00 nc	7.3E+01 nc
Napropamide	1.0E-01 l	1.0E-01 r	0.10	15286-98-7	6.8E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc
Nickel (soluble salts)	2.0E-02 l	0.01	7440-02-0	"CAL-Modified PRG" (PEA, 1994)	1.5E+03 nc	3.4E+04 nc	7.3E+02 nc	1.3E+02
Nickel refinery dust	8.4E-01 l	0.01	n/a	"CAL-Modified PRG" (PEA, 1994)	1.6E+02	1.0E+03 nc	8.0E-03 ca	8.0E-03 ca
Nickel subsulfide	1.7E+00 l	1.5E-03 r	0.01	12035-72-2	9.8E+01 nc	1.0E+03 nc	4.0E-03 ca	5.5E+01 nc
Nitrapyrin	1.5E-03 x	1.5E-03 r	0.10	1929-92-4	9.8E+01 nc	1.0E+03 nc	5.5E+00 nc	5.5E+01 nc
Nitrate	1.6E-00 l	0.01	14797-55-8	Nitric Oxide	6.5E+03 nc	1.0E+05 max	3.7E+03 nc	3.7E+04 nc
Nitrite	1.0E-01 x	0.10	10102-43-9	2-Nitroaniline	6.5E+03 nc	1.0E+05 max	3.7E+03 nc	3.7E+03 nc
Nitrofurazone	1.0E-01 l	0.10	14787-45-0	3-Nitroaniline	3.0E+00 nc	4.1E+01 nc	2.1E-01 nc	2.2E+00 nc
Nitrogen dioxide	6.0E-05 r	5.7E-05 h	0.10	88-74-4	4-Nitroaniline	1.8E+01 nc	9.4E+01 nc	2.1E+00 nc
Nitrobenzene	5.0E-04 l	5.7E-04 h	1.10	98-93-3	4.6E+03 nc	4.8E+04 nc	2.6E+02 nc	2.6E+03 nc
Nitrofurantoin	7.0E-02 h	7.0E-02 r	0.10	67-20-9	3.0E-01 ca	1.3E+00 ca	7.2E-04 nc	4.5E-02 ca
Nitrofurazone	1.5E+00 h	9.4E+00 h	0.10	59-87-0	1.0E+00 nc	1.0E+01 nc	2.1E-01 nc	2.2E+00 nc
Nitrogen dioxide	1.0E-00 x	1.0E-01 l	0.10	10102-44-0	6.5E+03 nc	6.8E+04 nc	3.7E+02 nc	3.7E+03 nc
Nitroguanidine	1.0E-01 l	1.0E-01 r	0.10	556-94-7	4-Nitrophenol	1.0E+01 nc	1.0E+01 nc	1.0E+01 nc
2-Nitropropane	9.4E+00 r	5.7E-03 r	1.10	79-46-9	2.2E-02 ca	5.5E-02 ca	7.2E-04 ca	3.5E+01 ca
N-Nitrosodi-n-butylamine	5.4E-00 l	5.6E-00 l	1.10	924-16-3	1.6E-01 ca	6.8E-01 ca	1.2E-03 ca	2.0E-03 ca
N-Nitrosodimethylamine	2.8E+00 l	2.8E+00 r	0.10	1116-54-7	3.0E-03 ca	1.3E-02 ca	2.4E-03 ca	2.4E-02 ca
N-Nitrosodimethylamine	1.5E-02 l	4.9E+01 l	0.10	55-18-5	8.7E-03 ca	3.7E-02 ca	1.4E-04 ca	4.5E-04 ca
N-Nitrosodiphenylamine	4.9E-03 l	4.9E-03 r	0.10	62-75-0	9.1E+01 ca	3.9E+02 ca	1.4E+00 ca	1.3E-03 ca
N-Nitroso di-n-propylamine	7.0E+00 l	7.0E+00 r	0.10	68-30-0	6.3E-02 ca	2.7E-01 ca	9.6E-04 ca	1.0E+00 ca
N-Nitroso-N-methyl ethylamine	2.2E+01 l	2.2E+01 r	0.10	621-44-7	2.0E-02 ca	8.7E-02 ca	3.1E-04 ca	3.1E-03 ca
N-Nitrosopyrrolidine	2.1E+00 l	2.1E+00 r	0.10	930-35-2	2.1E-01 ca	9.1E-01 ca	3.1E-03 ca	3.2E-02 ca
m-Nitrotoluene	1.0E-02 h	1.0E-02 r	0.10	98-92-1	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc
p-Nitrotoluene	1.0E-02 h	1.0E-02 r	0.10	98-92-0	6.5E+02 nc	6.8E+03 nc	3.7E+01 nc	3.7E+02 nc

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Contaminant	Preliminary Remedial Goals			Soil Screening Levels		
	SFR 1/(mg/kg-d) (mg/kg-d)	RDI 1/(mg/kg-d) (mg/kg-d)	CAS No.	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Tap Water (µg/m ³)
PAHs continued				6.1E-02 ea	2.6E-01 ea	9.2E-04 ea
Benzofluorine "CAL-Modified PRG" (PEA, 1994)				1.5E-03	1.5E-03	8.0E+00
Chrysene "CAL-Modified PRG" (PEA, 1994)	7.3E+00	21E+01	9.2E+00	9.2E+00	9.2E+00	1.6E+02
Dibenz[ah]anthracene	7.3E+00	63-70-3	6.1E+00	2.6E-01 ea	9.2E-04 ea	2.0E+00
Fluoranthene	4.0E-02	4.0E-02	9.0E+03 nc	2.7E+04 nc	1.5E+02 nc	8.0E-02
Fluorene	4.0E-02	1.0E-02	9.0E+01 nc	9.0E+01 nc	1.5E+02 nc	2.1E+02
Indeno[1,2,3-cd]pyrene	7.3E+01	193-39-6	6.1E-01 ea	2.6E+00 ea	9.2E-03 ea	2.8E+01
Naphthalene	4.0E-02	1.0E-02	2.4E+02	2.4E+02	2.4E+02	7.0E-01
Pyrene	4.0E-02	1.0E-02	1.0E+02	1.0E+02	1.1E+02	4.0E+00
Prachloraz	3.0E+02	1.0E-02	3.0E+00	1.3E+01 ea	4.5E-02 ea	2.1E+02
Profuralin	9.0E-03	0.10	67747-06-5	3.9E+02 nc	4.1E+03 nc	2.2E+02
Prometon	1.5E-02	0.10	28306-36-0	9.8E+02 nc	1.0E+04 nc	5.5E+02
Prometryn	4.0E-03	0.10	1610-18-0	2.6E+02 nc	2.7E+03 nc	1.5E+02
Pronamide	7.5E-02	0.10	23150-54-5	4.9E+03 nc	5.1E+04 nc	2.7E+02
Propachlor	1.3E-02	0.10	1918-16-7	8.6E+02 nc	8.9E+03 nc	4.7E+01
Propanil	5.0E-03	0.10	708-98-8	3.3E+02 nc	3.4E+03 nc	5.5E+01
Propargyl alcohol	2.0E-02	0.10	2312-35-4	1.3E+03 nc	1.4E+04 nc	1.5E+02
Propazine	2.0E-03	0.10	167-19-7	1.3E+02 nc	1.4E+03 nc	7.3E+01
Propham	2.0E-02	0.10	122-42-9	1.3E+03 nc	1.4E+04 nc	7.3E+02
Propiconazole	1.3E-02	0.10	60207-90-1	8.6E+02 nc	8.9E+03 nc	4.7E+02
Propylene glycol	2.0E-01	0.10	57-65-9	1.0E+05 max	1.0E+05 max	7.3E+05
Propylene glycol, monoethyl ether	7.0E-01	0.10	111-55-3	4.6E+04 nc	1.0E+05 max	2.6E+04
Propylene oxide	7.0E-01	0.10	107-84-2	4.6E+04 nc	1.0E+05 max	2.1E+04
Pursulf	2.5E-01	0.10	61315-77-6	1.6E+04 nc	1.0E+05 max	5.2E-01
Pyridin	2.5E-02	0.10	61630-54-1	1.6E+03 nc	1.7E+04 nc	9.1E+02
Quinalphos	1.0E-03	0.10	110-84-1	6.6E+01 nc	6.8E+02 nc	3.7E+01
Quinalphos	5.0E-04	0.10	13503-03-8	3.3E+01 nc	3.4E+02 nc	1.8E+01
Quinalone	1.2E+01	0.10	91-22-6	3.7E-02	1.6E-01	5.6E-03
RDX (Cyclonite)	1.1E+11	3.0E-03	5.0E-04	4.0E+00 ca*	1.7E+01	6.1E-02
Resmethrin	3.0E-02	0.10	121-82-4	2.0E+03 nc	2.0E+04 nc	1.1E+02
Ronnel	5.0E-02	0.10	269-84-3	3.3E+03 nc	3.4E+04 nc	1.8E+03
Rotenone	4.0E-03	0.10	83-70-4	2.6E+02 nc	2.7E+03 nc	1.5E+02
Savay	2.5E-02	0.10	73576-05-0	1.6E+03 nc	1.7E+04 nc	9.1E+01
Selenious Acid	5.0E-03	0.10	7783-00-8	3.3E+02 nc	3.4E+03 nc	1.8E+02
Selenium	5.0E-03	0.01	7782-48-2	3.8E+02 nc	8.5E+03 nc	1.9E+02
Selenourea	5.0E-03	0.10	630-10-4	3.3E+02 nc	3.4E+03 nc	1.8E+02
Sethoxydim	9.0E-02	0.10	74051-80-2	5.9E+03 nc	6.1E+04 nc	3.3E+02
Silver and compounds	5.0E-03	0.01	7440-22-4	3.8E+02 nc	8.5E+03 nc	1.8E+02
Slimazine	1.2E-01	1.2E-01	2.0E-03	3.7E+00 ca*	1.6E+01	5.6E-01
Sodium azide	4.0E-03	4.0E-03	0.10	122-34-9	2.6E+02 nc	1.5E+01
Sodium diethylidithiocarbamate	3.0E-02	3.0E-02	0.10	26828-22-8	1.6E+00 ca	2.5E-01
Sodium fluoroacetate	2.0E-05	2.0E-05	0.10	148-18-5	1.4E+01 nc	7.3E-01
Sodium metavanadate	1.0E-03	1.0E-03	0.10	13116-26-8	6.6E+01 nc	3.7E+01

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Preliminary Remediation Goals (PRGs)										
Soil Screening Levels						Migration to Ground Water				
Contaminant			Residential Soil (mg/kg)			Industrial Soil (mg/kg)		Ambient Air (ug/m³)		Tap Water (ug/l)
SFC (mg/kg)	RfD (mg/kg-d)	STF (mg/kg-d)	KD (mg/kg-d)	V skin	C skin	C solns	C solns	C solns	C solns	Migration (mg/kg)
8.7E-03	4.0E-03	8.7E-03	4.0E-03	0	0	30560.19	1	5.6E+01	c*	7.7E+00
2.0E-02	1	7.1E-03	2.6E-03	1	1	75.07	0	2.8E+02	c*	7.7E+00
1.0E-01	1	1.0E-01	2.0E-02	1	0	1	342.42	1	2.3E+01	c*
6.0E-01	1	6.0E-01	1	1	1	67.64	1	1.2E+03	nc	7.3E+02
6.0E-03	4	8.0E-04	1	0	1	75.86	5	1.6E+03	nc	6.1E+02
1.0E-01	1	1.7E-02	1	1	1	175.05	4	4.9E+01	nc	7.9E+01
1.0E-01	0	1.1E-01	1	1	1	98.65	2	2.7E+02	nc	6.2E+01
4.1E-01	1	2.0E-02	h	1	0	1	65094.66	6	4.9E+01	nc
5.4E-01	1	5.0E-01	1	4.6E-01	1	0	1	107.02	8	4.2E+02
8.1E-02	h	1.0E-03	h	2.0E-04	1	0	1	79.46	1	1.0E+01
5.0E-01	1	1.0E-03	h	2.4E-01	1	0	1	29.10	7	1.0E+04
1.0E-01	0	1.0E-02	h	8.0E-02	1	0	1	107.13	1	3.9E+02
1.5E-01	1	1.5E-01	1	1.3E-01	1	0	1	15397.60	8	8.4E+01
1.0E-03	1	1.0E-03	1	1.5E-01	1	0	1	518.51	1	6.1E+01
1.0E-03	1	1.0E-03	1	1.0E-01	1	0	1	16.06	3	6.1E+01
1.7E+01	1	3.0E-05	1	1.7E+01	1	0	1	1846.88	4	1.5E+02
2.5E-01	1	2.5E-01	1	3.0E-04	1	0	1	209.00	2	1.0E+01
5.0E-03	1	5.0E-03	1	9.0E-03	1	0	1	555.64	4	1.0E+03
5.0E-02	x	5.0E-02	1	5.0E-03	1	0	1	107.18	6	9.1E+02
1.0E-00	h	1.0E-03	1	2.0E-04	1	0	1	102.05	1	1.0E+01
4.0E-04	1	4.0E-04	1	3.0E-04	1	0	1	20458.72	8	1.0E+04
9.0E-03	1	9.0E-03	1	9.0E-04	1	0	1	67465.29	4	1.0E+01
7.0E-02	h	7.0E-02	1	7.0E-02	1	0	1	591.27	5	1.0E+02
2.0E-05	h	2.0E-05	1	1.0E-01	1	0	1	4-Aminopyridine	Amidraz	1.0E+01
2.5E-03	1	2.5E-03	1	2.0E-05	1	0	1	30369.61	1	9.1E+01
5.7E-03	1	2.0E-01	1	7.0E-03	1	0	1	7664.41	7	7.3E+01
4.0E-04	1	7.0E-04	1	2.9E-04	1	0	1	62.53	1	1.0E+00
5.0E-04	1	5.0E-04	1	0	1	0	1	7440.36	0	1.0E+00
9.0E-04	h	9.0E-04	1	0	1	0	1	3114.63	9	1.0E+00
4.0E-04	h	4.0E-04	1	0	1	0	1	20800.74	5	1.0E+00
4.0E-04	h	4.0E-04	1	0	1	0	1	1312.81	6	1.0E+00
1.3E-02	1	1.3E-02	1	5.7E-05	1	0	1	3039.64	4	1.0E+01
2.5E-02	1	5.0E-02	1	2.5E-02	1	0	1	77915.24	5	1.0E+02
4.0E-01	1	5.0E-01	1	5.0E-02	1	0	1	40537.8	8	1.0E+02
1.5E+00	1	3.0E-04	1	1.5E-01	1	0	1	7440.38	2	1.0E+00
1.0E-01	1	1.0E-01	1	4.0E-04	1	0	1	71751.41	2	1.0E+00
7.0E-02	1	7.0E-02	1	1.4E-04	1	0	1	7440.38	2	1.0E+00
9.0E-03	1	9.0E-03	1	1.4E-04	1	0	1	7440.39	3	1.0E+00
5.0E-02	1	5.0E-02	1	5.0E-02	1	0	1	114.26	1	1.0E+00
2.2E-01	h	2.5E-02	1	2.2E-01	1	0	1	7172.49	1	1.0E+00
1.0E-01	1	4.0E-04	1	4.0E-04	1	0	1	7440.38	2	1.0E+00
7.0E-02	1	7.0E-02	1	1.4E-04	1	0	1	7844.42	1	1.0E+00
4.0E-03	1	4.0E-03	1	4.0E-03	1	0	1	100.32	7	1.0E+00
3.0E-02	1	3.0E-03	1	3.0E-02	1	0	1	31321.43	3	1.0E+00
5.5E-02	1	3.0E-03	1	2.7E-02	1	0	1	7143.12	1	1.0E+00
5.5E-02	1	5.0E-02	1	2.5E-02	1	0	1	6355.37	5	1.0E+00
3.0E-01	1	3.0E-01	1	3.0E-01	1	0	1	1861.40	1	1.0E+00
5.0E-02	1	5.0E-02	1	5.0E-02	1	0	1	7709.45	2	1.0E+00
3.0E-02	1	3.0E-02	1	3.0E-02	1	0	1	20557.89	0	1.0E+00
1.0E-01	1	1.0E-01	1	1.0E-01	1	0	1	7440.38	2	1.0E+00
6.1E-03	1	6.1E-03	1	6.1E-03	1	0	1	7440.38	2	1.0E+00
6.5E-01	1	6.5E-01	1	6.5E-01	1	0	1	7143.12	1	1.0E+00
5.5E-02	1	5.5E-02	1	5.5E-02	1	0	1	2.5E-01	1	1.0E+00

Key: h =Hazardous; o =NCEA; x =WITHDRAWN; o =Other EPA DOCUMENTS; r =ROUTE EXTRAPOLATION; c =CANCER PRG; n =NON-CANCER PRG; m =CEILING LIMIT; "where: nc < 100x ca" (where: nc < 100x ca) "where: nc > 100x ca" (where: nc > 100x ca)

FOR PLANNING PURPOSES

TOXICITY INFORMATION										CONTAMINANT									
SF _o	RfD _o	Sf _l	1/(mg/kg-d)	HDI	V skin	C abs	C soins	C sons	C ads	C soins	C ads	C sons	C ads	C soins	C sons	C ads	C soins	C ads	C soins
2.3E-02	1.0E-03	2.3E-02	1	3.0E-03	1	0	0	1	92.87-5	Benzidine									
1.3E-01	4.0E+00	1	3E+01	r	4.0E+00	1	0	1	95.4E-0	Benzoic acid									
1.7E-01	3.0E-01	h	7E+01	1	3.0E-01	r	0	1	100.5E-6	Benzotrichloride									
2.0E-03	1.0E-01	8.4E-00	1	5.7E-06	1	0	1	100.4E-7	Benzyl chloride										
1.0E-04	1	1.0E-04	1	1.0E-04	r	0	1	141.6E-2	Beryllium and compounds										
1.5E-02	1.5E-02	1	1.5E-02	1	1.5E-02	1	0	1	92.5E-04-3	Bifenthrin (Taisan)									
5.0E-02	1	5.0E-02	1	5.0E-02	1	1	1	92.5E-4	1,1-Biphenyl										
1.1E-00	1	1.2E+00	1	1	111.4E-4	Bis(2-Chloroethyl)ether													
7.0E-02	h	4.0E-02	1	3.5E-02	h	4.0E-02	1	1	108.0E-1	Bis(2-chloroethyl)spirophosphorether									
2.2E-02	1	2.2E+02	1	1	1	5.7E-06	1	1	542.8E-1	Bis(chloromethyl)ether									
7.0E-02	h	4.0E-02	1	3.5E-02	h	4.0E-02	1	1	108.6E-1	Bis(2-Chloro-1-methylethyl)ether									
1.4E-02	1	2.0E-02	1	1.4E-02	1	1.7E-02	1	0	1	117.9E-7	Bis(2-ethylhexyl)hexahalide (DEHP)								
5.0E-02	1	5.0E-02	1	5.0E-02	1	0	1	90.0E-7	Bisphenol A										
9.0E-02	1	5.7E-03	h	0	0	1	74.0E-2	Boron											
7.0E-02	h	2.0E-02	1	6.2E-02	1	2.0E-02	1	1	76.3E-2	Boron trifluoride									
7.9E-03	1	2.0E-02	1	3.9E-03	1	2.0E-02	1	0	1	108.6E-1	Bromodichloromethane								
6.2E-02	1	2.0E-02	1	2.0E-02	1	2.0E-02	1	1	75.2E-4	Bromoform (tribromomethane)									
1.4E-13	1	1.4E-13	1	1.4E-13	1	1.4E-13	1	1	143.9E-9	Bromophos									
5.0E-03	h	5.0E-03	1	5.0E-03	1	0	0	1	101.5E-3	4-Bromophenyl phenyl ether									
2.0E-02	1	2.0E-02	1	2.0E-02	1	2.0E-02	1	0	1	169.9E-5	Bromoxynil								
1.8E-00	1	1.8E-00	1	1.8E-00	1	1	1	108.9E-0	Bromoxynil octanoate										
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	0	1	71.3E-3	1,3-Butadiene								
5.0E-02	1	5.0E-02	1	5.0E-02	1	0	1	104.4E-2	1-Butanol										
1.0E-02	h	1.0E-02	1	1.0E-02	1	1.0E-02	1	1	104.5E-5	In Butylbenzene									
1.0E-02	h	1.0E-02	1	1.0E-02	1	1.0E-02	1	1	135.6E-8	sec-Butylbenzene									
1.0E-02	h	1.0E-02	1	1.0E-02	1	1.0E-02	1	1	98.0E-6	Tert-Butylbenzene									
2.0E-01	1	2.0E-01	1	2.0E-01	1	0	1	75.6E-7	Butyl benzyl phthalate										
1.0E-03	h	3.0E-03	1	3.0E-03	1	0	1	65.7E-1	Butylphthalyl butylglycolate										
5.0E-04	1	6.3E-00	1	6.3E-00	1	0	0	1	75.6E-5	Cäcodylic acid									
3.0E-01	1	5.0E-01	1	5.0E-01	1	2.0E-01	1	1	75.1E-0	Cadmium and compounds									
8.6E-30	h	2.0E-03	1	8.6E-03	1	2.0E-03	1	0	1	105.6E-2	"CAL-Modified PRG" (PEA, 1994)								
3.5E-03	h	1.3L-01	1	1.3L-01	1	1.3L-01	1	0	1	105.6E-1	Caprofatem								
2.0L-02	h	1.0L-01	1	1.0L-01	1	1.0L-01	1	1	104.4E-2	Caprolactam									
4.0E-01	h	1.5E-02	1	4.0E-01	1	4.0E-01	1	0	1	132.5E-2	Carbamyl								
3.5E-01	1	5.0E-04	1	5.3E-01	1	7.0E-04	1	0	1	132.9E-4	Carboxin								
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	68.7E-4	Carbofuran									
1.3E-01	1	7.0E-04	1	5.3E-02	1	7.0E-04	1	0	1	50.2E-5	Carbon tetrachloride								
1.0E-02	1	1.0E-02	1	1.0E-02	1	1.0E-02	1	0	1	55.2E-14.8	Carbosulfan								
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	52.3E-68.4	Carboxin									
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	132.9E-4	Chloramben									
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	0	1	118.7E-2	Chloranil								
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	0	1	127.89E-03.6	Chlordane								
1.0E-01	1	2.0E-02	1	2.0E-02	1	2.0E-02	1	0	1	90.9E-32.4	Chloruron-ethyl								
1.0E-01	1	5.7E-05	h	5.7E-05	h	77.62E-50.5	Chlorurone												
2.0E-03	h	2.0E-03	1	2.0E-03	1	1.0E-01	1	0	1	101.2E-20.0	Chloroacetaldehyde								
2.0E-03	h	2.0E-03	1	2.0E-03	1	7.61E-14.8	Chloroacetic acid												

PRELIMINARY REMEDIATION GOALS (PRGs)																			
SOIL SCREENING LEVELS										Migration to Ground Water									
Residential					Industrial					Ambient Air (ug/m ³)					Tap Water (ug/L)				
Soil (mg/kg)					Soil (mg/kg)					(ug/m ³)					(ug/L)				
2.1E-03	ca	1.1E-02	ca	2.9E-04	1.0E-03	ca	1.0E-02	ca	2.9E-04	1.0E-03	ca	1.0E-05	ca	1.0E-03	ca	4.0E-02	2.0E+01		
1.0E-01	max	1.0E-01	max	1.0E-01	3.7E-02	ca	1.9E-01	ca	5.2E-04	3.7E-02	ca	5.2E-03	ca	5.2E-03	ca				
1.7E-01	1	1.7E-01	1	1.7E-01	1	1.7E-01	1	1	1.1E+04	1.7E-01	1	1.1E+03	1	1.1E+03	1	6.3E+01	3.0E+00		
2.0E-03	h	2.0E-03	1	2.0E-03	1	2.0E-03	1	1	8.9E-01	2.3E+00	1	8.0E-02	ca	8.0E-02	ca	6.3E+02	3.0E+01		
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	1.5E+02	2.2E+03	1	1.5E+01	ca	1.5E+01	ca	3.0E+02	3.0E+01		
1.7E-01	1	1.7E-01	1	1.7E-01	1	1.7E-01	1	1	1.0E+02	1.7E+02	1	1.0E+01	ca	1.0E+01	ca	6.3E+01	3.0E+01		
2.0E-02	h	2.0E-02	1	2.0E-02	1	2.0E-02	1	1	9.2E+01	1.6E+02	1	9.2E+00	ca	9.2E+00	ca	3.0E+02	3.0E+01		
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.7E-01	1	1.7E-01	1	1.7E-01	1	1.7E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
2.0E-02	h	2.0E-02	1	2.0E-02	1	2.0E-02	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.7E-01	1	1.7E-01	1	1.7E-01	1	1.7E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
2.0E-02	h	2.0E-02	1	2.0E-02	1	2.0E-02	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.7E-01	1	1.7E-01	1	1.7E-01	1	1.7E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
2.0E-02	h	2.0E-02	1	2.0E-02	1	2.0E-02	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1	8.9E+01	1.5E+02	1	8.0E+00	ca	8.0E+00	ca	3.0E+02	3.0E+01		
1.7E-0																			

FOR PLANNING PURPOSES

Key: ✓=HIS, n=HEAST, n=NEA, =WIDRAWN, =Other EPA DOCUMENTS, =ROUTE EXTRAPOLATION, c=CANCER PRG, nc=NONCANCER PRG, m=SOIL SATURATION LIMIT, t=white, nc < 100x tal, **=white, nc < 10x tal

TOXICITY INFORMATION										PRELIMINARY REMEDIATION GOALS (PRGS)											
CONTAMINANT		Soil (mg/kg)				V skin				Soil No				Residential				Industrial			
SEo	RIo	SFI	RDI	V (mg/kg-d)	V (mg/kg-d)	O aus	C soils	V	skin	O aus	C soils	V	skin	O aus	C soils	Soil (mg/kg)	Tap Water (µg/m³)	Ambient Air (µg/m³)	Migration to Ground Water (µg/m³)		
8.6E-06	/	8.6E-06	/	8.6E-06	1	532.27	4	1.1E-01	nc	3.1E-02	nc	5.2E-02	nc	3.1E-02	nc	2.4E+02	3.5E+01	1.5E+02	7.0E-01		
4.0E-03	/	4.0E-03	/	4.0E-03	0	0	1	1.0E-02	n	1.0E-02	nc	1.5E+02	nc	1.5E+02	nc	5.4E+02	6.2E+01	1.1E+02	1.0E+00		
2.0E-02	/	2.0E-02	/	2.0E-02	1	2.7E-01	n	2.0E-02	1	5.1E-01	5.1E-01	1.5E+02	1.5E+02	1.5E+02	1.5E+02	9.1E+00	2.5E+02	2.5E+02	2.5E+01		
2.7E-01	h	2.0E-02	/	2.7E-01	n	2.0E-02	1	0	0	5.1E-01	5.1E-01	1.2E+04	1.0E+04	1.2E+03	1.2E+03	1.0E+04	7.3E+02	7.3E+01	7.3E+02	7.0E-02	
2.0E-01	h	2.0E-01	/	2.0E-01	h	2.0E-01	1	0	0	2.4E-01	2.4E-01	9.6E+03	7.3E+03	9.6E+03	7.3E+03	9.6E+03	7.3E+02	7.3E+01	7.3E+02	7.0E-02	
2.0E-02	h	2.0E-02	/	2.0E-02	1	2.0E-02	1	0	0	9.6E-02	9.6E-02	4.8E+03	3.6E+03	4.8E+03	3.6E+03	4.8E+03	3.6E+02	3.6E+01	3.6E+02	3.6E+01	
2.0E-02	h	2.0E-02	/	2.0E-02	h	2.0E-03	h	1	1	1.2E-01	1.2E-01	4.8E+02	3.6E+02	4.8E+02	3.6E+02	4.8E+02	3.6E+01	3.6E+01	3.6E+01	3.6E+01	
4.0E-01	h	4.0E-01	/	4.0E-01	h	4.0E-01	1	0	0	1.4E-01	1	7.6E-03	1.0E-02	7.6E-03	1.0E-02	7.6E-03	1.0E-02	7.6E-03	1.0E-02	7.6E-03	
2.9E-03	n	4.0E-01	n	2.9E-03	1	2.9E-01	n	1	1	7.5E-03	1	11.0E-03	1	11.0E-03	1	3.0E+00	6.5E+00	4.3E+00	4.6E+00	ca*	
6.1E-03	1	1.0E-02	1	8.1E-02	1	8.6E-05	n	1	1	7.5E-05	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	
1.3E-02	h	6.3E-03	h	8.6E-02	n	8.6E-02	n	1	1	7.4E-07	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	
5.6E-01	h	5.6E-01	h	5.6E-01	h	5.6E-01	h	1	1	5.5E-02	1	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	
4.6E-01	h	8.0E-02	h	4.6E-01	h	8.0E-02	h	1	1	3.6E-03	1	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	4.4E-02	
2.5E-02	h	2.5E-02	h	2.5E-02	h	2.5E-02	h	1	1	9.1E-07	1	2.3E+00	2.3E+00	2.3E+00	2.3E+00	2.3E+00	2.3E+00	2.3E+00	2.3E+00	2.3E+00	
1.6E-02	h	1.6E-02	h	1.6E-02	h	1.6E-02	h	1	1	1.0E-05	1	1.0E+00	1.0E+00	1.0E+00	1.0E+00	1.0E+00	1.0E+00	1.0E+00	1.0E+00	1.0E+00	
5.0E-03	1	5.0E-03	1	5.0E-03	1	5.0E-03	1	1	9.5E-08	1	6.3E-01	6.3E-01	6.3E-01	6.3E-01	6.3E-01	6.3E-01	6.3E-01	6.3E-01	6.3E-01		
2.6E-02	h	2.6E-02	h	2.6E-02	h	2.6E-02	h	1	1	5.2E-06	1	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	2.7E+00	
1.1E-02	h	1.5E-02	h	1.1E-02	h	1.5E-02	h	1	1	1.8E-05	1	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	
2.0E-02	h	2.0E-02	h	2.0E-02	h	2.0E-02	h	1	1	9.5E-06	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	
2.0E-01	h	2.0E-01	h	2.0E-01	h	2.0E-01	h	1	1	1.0E-01	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	
3.0E-03	1	3.0E-03	1	3.0E-03	1	3.0E-03	1	1	2.9E-02	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00		
5.0E-02	h	5.0E-02	h	5.0E-02	h	5.0E-02	h	1	1	5.0E-02	1	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	1.2E+00	
8.0E-04	h	8.0E-04	h	8.0E-04	h	8.0E-04	h	1	1	1.8E-05	1	6.0E+00	6.0E+00	6.0E+00	6.0E+00	6.0E+00	6.0E+00	6.0E+00	6.0E+00	6.0E+00	
1.5E-00	1	4.2E-01	1	1.5E-00	1	1.5E-00	1	1	1.5E-00	1	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00	1.6E+00		
1.0E-03	1	2.9E-02	1	1	0	0	0	0	0	18540.29	1	18540.29	1	18540.29	1	3.0E-01	6.4E+01	2.3E-05	2.3E-01	3.8E+01	
6.0E-02	h	6.0E-02	h	6.0E-02	h	6.0E-02	h	1	1	7.4E-04	1	7.4E-04	7.4E-04	7.4E-04	7.4E-04	7.4E-04	7.4E-04	7.4E-04	7.4E-04		
3.7E-02	h	3.7E-02	h	3.7E-02	h	3.7E-02	h	1	1	6.0E-04	1	6.0E-04	6.0E-04	6.0E-04	6.0E-04	6.0E-04	6.0E-04	6.0E-04	6.0E-04		
1.9E-00	h	1.9E-00	h	1.9E-00	h	1.9E-00	h	1	1	1.2E-03	1	5.3E-03	5.3E-03	5.3E-03	5.3E-03	5.3E-03	5.3E-03	5.3E-03	5.3E-03	5.3E-03	
8.4E-01	h	2.0E-03	h	8.4E-01	h	2.0E-03	h	1	1	1.1E-01	1	1.1E-01	1	1.1E-01	1	1.1E-01	1	1.1E-01	1	1.1E-01	
2.0E-02	h	2.0E-02	h	2.0E-02	h	2.0E-02	h	1	1	1.0E-02	1	1.0E-02	1	1.0E-02	1	1.0E-02	1	1.0E-02	1	1.0E-02	
7.5E-03	1	7.5E-03	1	7.5E-03	1	7.5E-03	1	1	4.0E-02	1	4.0E-02	1	4.0E-02	1	4.0E-02	1	4.0E-02	1	4.0E-02		
5.0E-02	h	5.0E-02	h	5.0E-02	h	5.0E-02	h	1	1	9.0E-02	1	5.0E-02	5.0E-02	5.0E-02	5.0E-02	5.0E-02	5.0E-02	5.0E-02	5.0E-02	5.0E-02	
5.7E-00	1	5.7E-00	1	5.7E-00	1	5.7E-00	1	1	1.1E-02	1	1.1E-02	1	1.1E-02	1	1.1E-02	1	1.1E-02	1	1.1E-02		
5.0E-00	1	5.0E-00	1	5.0E-00	1	5.0E-00	1	1	5.0E-00	1	5.0E-00	1	5.0E-00	1	5.0E-00	1	5.0E-00	1	5.0E-00		
2.0E-01	h	2.0E-01	h	2.0E-01	h	2.0E-01	h	1	1	2.0E-01	1	1.0E-01	1.0E-01	1.0E-01	1.0E-01	1.0E-01	1.0E-01	1.0E-01	1.0E-01	1.0E-01	
2.4E-01	1	2.4E-01	1	2.4E-01	1	2.4E-01	1	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01	1	1.0E-01		
3.4E-01	1	5.0E-04	1	3.4E-01	1	5.0E-04	1	1	5.0E-04	1	5.0E-04	1	5.0E-04	1	5.0E-04	1	5.0E-04	1	5.0E-04		

TOXICITY INFORMATION										PRELIMINARY REMEDIATION GOALS (PRGS)											
CONTAMINANT		Soil (mg/kg)				V skin				Soil No				Residential				Industrial			
SEo	RIo	SFI	RDI	V (mg/kg-d)	V (mg/kg-d)	O aus	C soils	V	skin	O aus	C soils	V	skin	O aus	C soils	Soil (mg/kg)	Tap Water (µg/m³)	Ambient Air (µg/m³)	Migration to Ground Water (µg/m³)		
8.6E-06	/	8.6E-06	/	8.6E-06	1	532.27	4	1.1E-01	nc	3.3E-02	nc	5.2E-02	nc	3.1E-02	nc	2.4E+02	3.5E+01	1.5E+02	3.0E-02		
4.0E-03	1	4.0E-03	1	4.0E-03	1	1.0E-02	n	1	0	106.47	8	4-Chloroaniline	4-Chloroaniline	4-Chloroaniline	4-Chloroaniline	4-Chloroaniline	5.1E+02	6.2E+01	1.1E+02	7.0E-02	
2.0E-02	1	2.0E-02	1	2.0E-02	1	2.0E-02	1	0	1	108.90	7	Chlorobenzene	Chlorobenzene	Chlorobenzene	Chlorobenzene	Chlorobenzene	9.1E+00	1.0E+00	1.1E+00	7.0E-02	
2.7E-01	h	2.7E-01	h	2.7E-01	h	2.0E-02	1	0	1	510.15	6	p-Chlorobenzoic acid	1.2E+04	1.0E+04	1.0E+04	1.0E+04					
2.0E-02	h	2.0E-02	h	2.0E-02	h	2.0E-02	1	0	1	94.11	3	4-Chloro-1,3-butadiene	4-Chloro-1,3-butadiene	4-Chloro-1,3-butadiene	4-Chloro-1,3-butadiene	4-Chloro-1,3-butadiene	1.2E+03	1.0E+03	1.0E+03	1.0E+03	
2.0E-02	h	2.0E-02	h	2.0E-02	h	2.0E-02	1	0	1	126.99	8	1-Chlorobutane	1-Chlorobutane	1-Chlorobutane	1-Chlorobutane	1-Chlorobutane	3.6E+00	3.1E+00	3.1E+00	3.1E+00	
4.0E-01	h	4.0E-01	h	4.0E-01	h	4.0E-01	1	0	1												

FOR PLANNING PURPOSES

Key: I=IRIS, H=HEASI, N=NCEA, S=SWIDRAWN, O=Other EPA DOCUMENTS, R=ROUTE EXTRAPOLATION, C=CANCER PRG, n=NONCANCER PRO, S=SOIL SATURATION, m=CEILING LIMIT, 'w'here: nc < 100X est, 'where: nc < 10X est

SFC 1/(mg/kg-d)	RIDo (ng/kg-d)	SFI 1/(mg/kg-d)	V _{skin} O _{abs} C _{soils}	CAS No.	PRELIMINARY REMEDIATION GOALS (PRGs)				SOIL SCREENING LEVELS			
					Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m ³)	Top Water (ug/L)	Migration to Ground Water LDF (mg/kg)	Top Water (ug/L)	Migration to Ground Water LDF (mg/kg)	Top Water (ug/L)
2.6E+00 3.7E+01	X 1.0E+01 X	3.5E+00 3.7E+01	X X	57-14-7 1,1-Dimethylhydrazine 1,2-Dimethylhydrazine N,N-Dimethylamine	1.9E-01 ca 1.3E-02 nc	9.5E-01 ca 6.7E-02 nc	1.9E-03 ca 1.8E-04 nc	2.6E-02 ca 3.1E-01 nc	1.9E-01 ca 3.6E+03 nc	1.9E-01 ca 3.6E+03 nc	1.9E-01 ca 3.6E+03 nc	
1.0E+03 2.0E+02 6.0E+04	n h 1	1.0E+03 2.0E+02 6.0E+04	1 0 0	122-09-8 Dimethylphenylhydramine 2,4-Dimethylphenol 2,6-Dimethylphenol	6.1E+01 nc 3.7E+01 nc	8.8E+02 nc 5.3E+02 nc	3.7E+00 nc 2.2E+00 nc	3.6E+01 nc 3.6E+01 nc	3.6E+01 nc 7.3E+01 nc	3.6E+01 nc 7.3E+01 nc	3.6E+01 nc 9.0E+00 4.0E-01	
1.0E+03 1.0E+04 1.0E+04	n h 1	1.0E+03 1.0E+04 1.0E+04	1 0 0	105-87-9 1,2-Dimethylphenol 576-26-1	3.7E+01 nc 6.1E+01 nc	5.3E+02 nc 8.8E+02 nc	2.2E+00 nc 3.7E+00 nc	2.2E+01 nc 3.6E+01 nc	2.2E+01 nc 7.3E+01 nc	2.2E+01 nc 7.3E+01 nc	2.2E+01 nc 9.0E+00 4.0E-01	
1.0E+03 1.0E+04 1.0E+04	n h 1	1.0E+03 1.0E+04 1.0E+04	1 0 0	95-65-8 3,4-Dimethylphenol	1.0E+05 max 6.1E+03 nc	3.7E+04 max 8.8E+02 nc	3.7E+04 max 3.7E+02 nc	3.6E+05 max 3.6E+03 nc	3.6E+05 max 9.9E-02 nc	3.6E+05 max 9.9E-03 nc	3.6E+05 max 8.0E-04 4.0E-05	
1.0E+03 2.0E+03 4.0E+04 1.0E+04	n h 1 1	1.0E+03 2.0E+03 4.0E+04 1.0E+04	1 0 0 0	120-61-6 Dimethyl phthalate Dimethyl terephthalate 4-(6-Dimethyl-o-cyclotriphenoxy) Phenol	7.2E+02 nc 1.2E+02 nc 2.4E+01 nc	1.8E+03 nc 3.5E+02 nc 8.8E+01 nc	7.3E+00 nc 1.5E+02 nc 3.7E+01 nc	7.3E+00 nc 1.5E+00 nc 3.7E+01 nc	7.3E+00 nc 1.5E+01 nc 3.7E+02 nc	7.3E+00 nc 1.5E+01 nc 3.7E+02 nc	7.3E+00 nc 1.0E+01 nc 3.0E+01 nc	
6.6E+01	1	0.8E+01	1	2532-14-6 Dinitrotoluene mixture (See Dimitrotoluene mixture)	7.2E+01 nc	3.6E+00 ca	9.9E-03 ca	9.9E-02 ca	9.9E-03 ca	9.9E-03 ca	9.9E-03 ca	
2.0E+03	1	2.0E+03	1	121-14-2 2,4-Dinitrotoluene (See Dimitrotoluene mixture)	1.2E+02 nc	1.8E+03 nc	7.3E+00 nc	7.3E+01 nc	7.3E+00 nc	7.3E+00 nc	7.3E+00 nc	
1.0E+03 1.0E+03 1.0E+03	h h h	1.0E+03 1.0E+03 1.0E+03	1 0 0	686-20-2 2,6-Dinitrotoluene (See Dimitrotoluene mixture)	6.1E+01 nc 6.1E+01 nc	8.8E+02 nc 8.8E+02 nc	3.7E+00 nc 3.7E+00 nc	3.6E+01 nc 3.6E+01 nc	3.6E+01 nc 7.0E-04 3.0E-05	3.6E+01 nc 7.0E-04 3.0E-05	3.6E+01 nc 7.0E-04 3.0E-05	
1.0E+03 2.0E+02	h h	1.0E+03 2.0E+02	1 0	88-65-7 Di-n-Octyl phthalate	1.2E+03 nc	1.0E+04 sat	7.3E+01 sat	7.3E+01 sat	7.3E+02 sat	7.3E+02 sat	7.3E+02 sat	
1.1E+02	1	1.1E+02	1	1,4-Dioxane	4.4E+01 ca	2.2E+02 ca	6.1E-01 ca	6.1E-01 ca	6.1E-01 ca	6.1E-01 ca	6.1E-01 ca	
1.5E+05	h	1.5E+05	h	Dioxin (2,3,7,8-TCDD)	3.9E-06 ca	4.5E-06 ca	4.5E-06 ca	4.5E-06 ca	4.5E-06 ca	4.5E-06 ca	4.5E-06 ca	
3.0E+02	1	3.0E+02	1	121-14-2 2,4-Dinitrotoluene (See Dimitrotoluene mixture)	1.8E+03 nc	2.6E+04 nc	1.1E+02 nc	1.1E+02 nc	1.1E+02 nc	1.1E+02 nc	1.1E+02 nc	
2.5E+02	1	2.5E+02	1	122-39-4 Dibenzylamine	1.5E+03 nc	2.2E+04 nc	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	
3.0E+04	h	3.0E+04	h	1.8E+01 n	1.8E+01 n	1.1E+00 n	1.1E+00 n	1.1E+00 n	1.1E+00 n	1.1E+00 n	1.1E+00 n	
8.0E+01	1	7.7E+01	1	743-17-7 Di-n-Octyl sulfone	6.1E+01 ca	3.1E+00 ca	8.7E+03 ca	8.7E+03 ca	8.7E+03 ca	8.7E+03 ca	8.7E+03 ca	
9.0E+03	h	9.0E+03	h	9.0E+03 Diisobutyl sulfone	5.5E+02 nc	7.9E+03 nc	3.3E+01 nc	3.3E+01 nc	3.3E+01 nc	3.3E+01 nc	3.3E+01 nc	
2.2E+03	1	2.2E+03	1	85-66-7 Diisobutyl sulfone	1.3E+02 nc	1.9E+03 nc	8.0E+00 nc	8.0E+00 nc	8.0E+00 nc	8.0E+00 nc	8.0E+00 nc	
8.6E+00	h	8.6E+00	h	1837-37-7 Direct black 38	5.7E+02 ca	2.9E+01 ca	7.3E+02 ca	7.3E+02 ca	7.3E+02 ca	7.3E+02 ca	7.3E+02 ca	
8.1E+00	h	8.1E+00	h	2,5-E-02 Direct blue 6	6.0E-02 ca	3.0E+01 ca	8.3E-04 ca	8.3E-03 ca	8.3E-04 ca	8.3E-03 ca	8.3E-03 ca	
9.9E+00	h	9.9E+00	h	1607-14-6 Direct brown 96	5.2E-02 ca	2.7E+01 ca	7.2E-04 ca	7.2E-03 ca	7.2E-04 ca	7.2E-03 ca	7.2E-03 ca	
4.0E+05	1	4.0E+05	1	288-04-4 Distillation	2.4E+00 nc	3.5E+03 nc	1.5E+01 nc	1.5E+01 nc	1.5E+01 nc	1.5E+01 nc	1.5E+01 nc	
1.0E+02	1	1.0E+02	1	505-29-3 1,4-Dithiane	6.1E+02 nc	8.8E+03 nc	3.7E+01 nc	3.7E+01 nc	3.7E+01 nc	3.7E+01 nc	3.7E+01 nc	
2.0E+03	1	2.0E+03	1	330-54-1 Duron	1.2E+02 nc	1.8E+03 nc	7.3E+00 nc	7.3E+00 nc	7.3E+00 nc	7.3E+00 nc	7.3E+00 nc	
4.0E+03	1	4.0E+03	1	2602-46-6 Dysprosium	1.6E+04 nc	1.0E+05 max	5.3E+03 nc	5.3E+03 nc	5.3E+03 nc	5.3E+03 nc	5.3E+03 nc	
2.0E+01	0	2.0E+01	0	2439-10-3 Endosulfan	3.7E+02 nc	2.2E+03 nc	2.2E+01 nc	2.2E+01 nc	2.2E+01 nc	2.2E+01 nc	2.2E+01 nc	
6.0E+03	1	6.0E+03	1	80-03-1 Endothall	1.2E+03 nc	1.8E+04 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	
2.0E+02	1	2.0E+02	1	145-73-3 Endrin	1.8E+01 nc	2.6E+02 nc	1.1E+00 nc	1.1E+00 nc	1.1E+00 nc	1.1E+00 nc	1.1E+00 nc	
9.0E+03	1	3.0E+03	h	505-29-3 Epichlorohydrin	7.6E+00 nc	2.6E+01 nc	1.0E+00 nc	1.0E+00 nc	1.0E+00 nc	1.0E+00 nc	1.0E+00 nc	
5.7E+03	1	5.7E+03	1	106-88-7 1,2-Epoxybutane	3.5E+02 nc	5.0E+03 nc	2.1E+01 nc	2.1E+02 nc	2.1E+02 nc	2.1E+02 nc	2.1E+02 nc	
2.5E+02	1	2.5E+02	1	756-94-4 Ethyl acrylate	1.5E+03 nc	2.6E+04 max	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	9.1E+01 nc	
5.0E+03	1	5.0E+03	1	15672-87-0 Ethyl chloride	3.1E+02 nc	4.4E+03 nc	1.8E+01 nc	1.8E+01 nc	1.8E+01 nc	1.8E+01 nc	1.8E+01 nc	
5.0E+04	1	5.0E+04	1	583-12-2 Ethion	3.1E+01 nc	4.4E+02 nc	1.8E+00 nc	1.8E+00 nc	1.8E+00 nc	1.8E+00 nc	1.8E+00 nc	
4.0E+01	h	4.0E+01	h	57-14-7 2-Ethoxyethanol	2.4E+00 nc	1.0E+05 max	2.1E+02 nc	2.1E+02 nc	2.1E+02 nc	2.1E+02 nc	2.1E+02 nc	
3.0E+01	h	3.0E+01	h	111-16-9 2-Ethoxyethanol acetate	1.8E+04 nc	3.7E+04 sat	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	
4.8E+02	h	4.8E+02	h	9.0E+01 Ethyl acrylate	2.1E+01 ca	4.5E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	
2.9E+03	n	4.0E+01	n	2.9E+03 Ethylene cyanohydrin	3.0E+00 ca	6.5E+00 ca	2.3E+00 ca	2.3E+00 ca	2.3E+00 ca	2.3E+00 ca	2.3E+00 ca	
3.0E+01	h	3.0E+01	h	111-16-9 Ethylene diaminetetraacetic acid	1.8E+04 nc	3.7E+04 sat	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	1.4E+01 ca	
2.0E+02	h	2.0E+02	h	106-88-6 Ethylene diamine	1.2E+03 nc	1.8E+04 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	7.3E+01 nc	
2.0E+00	1	2.0E+00	1	107-21-1 Ethylene glycol	1.0E+05 max	1.0E+05 max	7.3E+03 nc	7.3E+03 nc	7.3E+03 nc	7.3E+03 nc	7.3E+03 nc	
5.0E+01	h	5.0E+01	h	117-76-2 Ethylene glycol, monobutyl ether	3.1E+04 nc	1.0E+05 max	1.4E+04 nc	1.4E+04 nc	1.4E+04 nc	1.4E+04 nc	1.4E+04 nc	
1.0E+00	h	1.5E+01	h	75-21-8 Ethylene oxide	1.4E-01 ca	3.6E-01 ca	1.9E-02 ca	1.9E-02 ca	1.9E-02 ca	1.9E-02 ca	1.9E-02 ca	

Key r=RI5 h=HEAS n=NCEA t=WIIIDRAWN o=GnlEPA DOCUMENTS f=ROUTE EXTRAPOLATION ca=CANCER PRG nc=NONCANCER PRG s1=SOIL SATURATION max=CEILING LIMIT (where: nc < 100X ca) .. (where: nc < 10X ca)

FOR PLANNING PURPOSES

CONTAMINANT TOXICITY INFORMATION

	Migration to Ground Water			Migration to Tap Water		
	DAF 10 (mg/kg)			DAF 20 (mg/kg)		
	Industrial Soil (mg/kg)	Ambient Air ($\mu\text{g}/\text{m}^3$)	Tap Water ($\mu\text{g}/\text{l}$)	Industrial Soil (mg/kg)	Ambient Air ($\mu\text{g}/\text{m}^3$)	Tap Water ($\mu\text{g}/\text{l}$)
SFC	RfD ₀ (mg/kg-d)	SFr (1/mg/kg-d)	V _{skin} O _{aus.} C soils	RfD ₁ (mg/kg-d)		CAS No.
	11(mg/kg-d)	1/(mg/kg-d)				

PRELIMINARY REMEDIATION GOALS (PRGs)

Key : IRIS = EAST = NCEA = OTHER EPA DOCUMENTS = ROUTE EXTRAPOLATION = CANCER PRG = NONCANCER PRG = SOIL SATURATION = CEILING LIMIT = WHERE = nc < 10X ea)

FOR PLANNING PURPOSES

CONTAMINANT

Sfo 1/(mg/kg-d)	KDDo (mg/kg-d)	Sf ₁ 1/(mg/kg-d)	V skin RID (mg/kg-d)	O abs (mg/kg-d)	C soils (mg/kg-d)	CAS No.	SOIL SCREENING LEVELS							
							PRELIMINARY REMEDIATION GOALS (PRGs)	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ng/m ³)	Top Water (ug/L)	Migration ID Ground Water DAF = 20 (mg/L)		
1.5E-02	1	1.5E-02	1	0	0.1	3554-44-0	Imazalil	1.1E+04	nc	4.7E+01	nc	4.7E+02	nc	
2.5E-01	1	2.5E-01	1	0	0.1	41335-37-7	Imazaquin	1.5E+04	1.0E+05	max	9.1E+02	nc	9.1E+03	nc
4.0E-02	1	4.0E-02	1	0	0.1	36734-19-7	Iprodione	2.4E+03	3.5E+04	nc	1.5E+02	nc	1.5E+03	nc
3.0E-01	n	7.43E-01	1	0	0	7439-89-6	Iron	2.3E+04	1.0E+04	max	1.1E+03	nc	1.1E+04	nc
6.5E-04	1	1.0E-01	1	1.0E-01	1	18-43-1	Isobutanol	5.1E+02	4.0E+04	sat	2.6E+03	ca	7.1E+00	ca
1.5E-02	1	2.0E-01	1	9.5E-04	1	26-56-1	Isophorone	9.2E+02	1.3E+04	nc	8.8E+04	nc	5.5E+02	nc
1.0E-10	1	1.0E-10	1	1.0E-01	1	33820-53-0	Isopropanil	6.1E+03	1.0E+03	nc	4.0E+02	nc	5.6E+03	nc
5.0E-02	1	5.0E-02	1	0	0.1	6258-50-7	Isoxaben	3.1E+03	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc
1.8E-01	n	1.8E-01	1	0	0.1	143-50-0	Lead	1.2E+02	1.4E+01	ca	3.7E+04	ca	3.7E+03	ca
2.0E-03	1	2.0E-03	1	2.0E-03	1	7750-13-4	Lead (tetraethyl)	4.0E+02	7.5E+02	nc	7.3E+00	nc	7.3E+01	nc
1.0E-07	1	1.0E-07	1	0	0.1	7439-92-1	Ledum	6.1E+03	8.8E+02	nc	1.8E+00	nc	3.6E+03	nc
2.0E-03	1	2.0E-03	1	2.0E-03	1	330-55-2	Linuron	1.2E+02	1.6E+02	nc	7.3E+00	nc	7.3E+03	nc
2.0E-02	n	7.439-92-2	1	0	0	7439-92-2	Lithium	1.6E+03	4.1E+04	nc	7.3E+02	nc	7.3E+02	nc
2.0E-01	1	2.0E-01	1	2.0E-01	1	83055-99-6	Lindan	1.2E+04	1.0E+05	max	7.3E+02	nc	7.3E+03	nc
2.0E-02	1	2.0E-02	1	2.0E-02	1	121-75-5	Maleic anhydride	6.1E+03	1.2E+03	nc	1.8E+04	nc	3.6E+03	nc
1.0E-01	1	1.0E-01	1	1.0E-01	1	108-31-6	Maleic hydrazide	1.7E+03	2.4E+03	sat	1.8E+03	nc	3.0E+03	nc
5.0E-01	1	5.0E-01	1	1	123-33-1	Malononitrile	1.2E+00	1.2E+00	nc	7.3E+02	nc	7.3E+01	nc	
2.0E-05	h	2.0E-05	h	2.0E-05	1	109-77-3	Manczozeb	1.8E+03	2.6E+04	nc	1.1E+04	nc	1.1E+02	nc
3.0E-02	h	3.0E-02	h	3.0E-02	1	8018-01-7	Mannéb	8.1E+00	4.1E+01	ca	4.1E+01	ca	1.1E+00	ca
6.0E-02	o	5.0E-03	1	6.0E-02	1	5.0E-03	Manganese and compounds	1.8E+03	3.2E+03	nc	3.2E+04	nc	5.1E-02	nc
2.4E-02	1	9.0E-05	h	9.0E-05	h	9.0E-05	Manganofolian	5.5E+00	7.9E+01	nc	3.3E+01	nc	3.3E+00	nc
9.0E-05	h	9.0E-05	h	9.0E-05	h	9.0E-05	Mepiquat	1.8E+13	2.6E+04	nc	1.1E+04	nc	1.1E+03	nc
2.9E-02	n	1.0E-01	h	2.9E-02	1	1.0E-01	2-Mercaptobenzothiazole	1.7E+01	ca	8.5E+01	ca	2.3E+00	ca	
3.0E-04	1	4.0E-02	1	1.0E-01	1	149-30-4	Mercury and compounds	2.3E+01	6.1E+02	nc	1.1E+01	nc	1.1E+01	nc
4.0E-05	1	6.0E-05	1	6.0E-05	1	7439-97-6	Mercury (elemental)	6.1E+00	8.8E+01	nc	3.1E+01	nc	3.6E+00	nc
1.0E-04	1	1.0E-05	1	1.0E-05	1	22867-92-6	Mercury (methyl)	1.8E+00	2.6E+01	nc	1.1E-01	nc	1.1E+00	nc
3.0E-05	1	3.0E-05	1	3.0E-05	1	150-50-5	Merphos	1.8E+05	2.6E+01	nc	1.1E-01	nc	1.1E+00	nc
3.0E-05	1	7.6E-05	1	7.6E-05	1	12427-38-2	Methacryl	3.7E+03	5.3E+04	nc	2.2E+03	nc	2.2E+03	nc
6.0E-02	1	8.0E-02	1	8.0E-02	1	128-98-7	Methacrylonitrile	2.1E+00	8.8E+00	nc	7.3E+01	nc	1.0E+00	nc
1.0E-04	1	2.0E-04	h	1	76-48-8	Methamidophos	1.8E+05	1.0E+05	nc	4.4E+01	nc	1.8E+03	nc	
5.0E-05	1	5.0E-05	1	5.0E-05	1	10285-92-6	Methanol	3.1E+04	1.0E+05	max	6.8E+02	nc	3.7E+00	nc
5.0E-01	1	5.0E-01	1	5.0E-01	1	67-56-1	Methathion	6.1E+01	1.0E+01	ca	5.4E+01	ca	1.5E+00	ca
1.0E-03	1	1.0E-03	1	1.0E-03	1	950-37-4	Methomyl	2.2E+04	9.6E+04	nc	3.7E+03	nc	6.1E+03	nc
2.5E-02	1	2.5E-02	1	1.0E-01	1	18752-77-5	Methomyl acetate	4.4E+01	1.3E+02	nc	9.1E+01	nc	1.5E+02	nc
5.0E-03	1	5.0E-03	1	5.0E-03	1	104-34-5	Methoxchlor	3.1E+03	4.4E+03	nc	1.9E+01	nc	1.8E+01	nc
1.0E-03	h	5.7E-03	1	1.0E-01	1	104-86-4	Methoxyethanol	6.1E+01	8.8E+02	nc	2.1E+01	nc	3.6E+01	nc
4.0E-02	h	4.0E-02	1	2.0E-03	1	110-49-6	2-Methoxyethanol acetate	1.2E+02	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc
1.0E-00	h	1.0E-00	h	1.0E-00	1	98-59-2	2-Methoxy-5-nitroaniline	1.1E+01	5.4E+01	ca	5.4E+01	ca	1.5E+00	ca
3.0E-02	n	3.0E-02	1	3.0E-02	1	76-20-9	Methyl acetate	7.0E+01	2.3E+02	nc	1.1E+02	nc	1.1E+02	nc
2.4E-01	h	2.4E-01	1	1.0E-01	1	96-33-3	Methyl acrylate	2.0E+00	ca	1.0E+01	ca	2.8E+02	ca	
1.6E-01	h	1.6E-01	1	1.0E-01	1	66-53-4	2-Methylaniline (o-tolidine)	2.7E+00	ca	1.4E+01	ca	3.7E+02	ca	
1.0E-00	x	1.0E-00	1	1.0E-00	1	79-22-1	Methyl chlorocarbonate	6.1E+04	1.0E+05	max	3.7E+03	nc	3.6E+04	nc
5.0E-04	1	5.0E-04	1	5.0E-04	1	94-74-6	2-Methyl-4-chlorophenoxycetic acid	3.1E+01	4.4E+02	nc	1.8E+00	nc	1.8E+01	nc
1.0E-02	1	1.0E-02	1	1.0E-02	1	94-81-5	4-(2-Methyl-4-chlorophenoxy) butyric acid	6.1E+01	1.0E+02	nc	8.8E+03	nc	3.6E+02	nc
1.0E-03	1	1.0E-03	1	1.0E-03	1	93-65-5	2-(2-Methyl-4-chlorophenoxy) propionic acid	6.1E+01	1.0E+01	nc	8.8E+02	nc	3.7E+01	nc
1.0E-03	1	1.0E-03	1	1.0E-03	1	18484-77-8	2-(2-Methyl-4-chlorophenoxy) trichloroethane	6.1E+01	8.8E+02	nc	3.7E+00	nc	3.6E+01	nc
8.0E-01	1	8.0E-01	1	8.0E-01	1	108-87-2	Methylcyclohexane	2.6E+03	8.8E+03	nc	3.1E+03	nc	5.2E+03	nc
2.5E-01	h	2.5E-01	h	3.0E-01	h	101-77-9	4,4'-Methylenebisbenzenearmine	1.9E+00	ca	9.9E+00	ca	2.7E+01	ca	
1.3E-01	h	7.0E-04	h	7.0E-04	1	101-14-4	4,4'-Methylene bis(2-chloroaniline)	3.7E+00	ca	1.9E+01	ca	5.2E+02	ca	
4.6E-02	1	4.6E-02	1	1.0E-01	1	101-61-1	4,4'-Methylene bis(N,N-dimethyl)aniline	1.1E+01	5.4E+01	ca	1.5E+01	ca	1.5E+00	ca

FOR PLANNING PURPOSES

TOXICITY INFORMATION

Key :
 I=IRIS II=HEAT N=NCEA X=WITHDRAWN O=Other EPA DOCUMENTS E=ROUTE EXTRAPOLATION C=CANCER PRG S1=SOIL SATURATION max=CEILING LIMIT 1'mile(s): nc < 100X cp " (where nc < 10X ca)

CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)			SOIL SCREENING LEVELS		
	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m ³)	Migration to Ground Water (mg/kg)	Leachate (mg/kg)	Total (mg/kg)
SFO	RfD _o (mg/kg-d) 1/(mg/kg-d)	RfD _i (mg/kg-d) 1/(mg/kg-d)	V _{skin} O _{abs.} C soils	CAS No		
TOXICITY INFORMATION						

Methylene bromide	6.7E+01	nc	2.4E+02	nc	3.7E+01	nc	6.1E+01	nc	2.0E-02	1.0E-03
Methylene chloride	8.9E+00	ca	2.1E+01	ca	4.1E+00	ca	4.3E+00	ca	2.0E-02	1.0E-03
4-(1-Methylpropyl) diisocyanate	1.0E+01	nc	1.5E+02	nc	6.2E+01	nc	6.2E+00	nc	2.0E-02	1.0E-03
Methyl ethyl Ketone	7.3E+03	nc	2.8E+04	nc	1.0E+03	nc	1.9E+03	nc	2.0E-02	1.0E-03
Methyl hydrazine	4.4E+01	ca	2.2E+00	ca	6.1E+03	ca	6.1E+02	ca	2.0E-02	1.0E-03
Methyl isobutyl ketone	7.9E+02	ca	1.8E+03	ca	1.6E+02	ca	1.6E+02	ca	2.0E-02	1.0E-03
Methyl mercaptan	3.5E+01	nc	5.0E+02	nc	2.1E+00	nc	2.1E+01	nc	2.0E-02	1.0E-03
Methyl methacrylate	2.2E+03	nc	2.7E+03	ca	7.3E+02	nc	1.4E+03	nc	2.0E-02	1.0E-03
2-Methyl-1-nitroaniline	1.5E+01	ca	2.0E+01	ca	2.0E+00	ca	2.0E+00	ca	2.0E-02	1.0E-03
Methyl Paraffin	1.5E+01	nc	2.2E+02	nc	9.1E+01	nc	9.1E+00	nc	2.0E-02	1.0E-03
2-Methylphenol	3.1E+03	ca	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc	1.5E+01	8.0E-01
3-Methylphenol	3.1E+03	nc	4.4E+04	nc	1.8E+02	nc	1.8E+03	nc	1.5E+01	8.0E-01
4-Methylphenol	3.1E+02	nc	4.4E+03	nc	1.8E+01	nc	1.8E+02	nc	1.5E+01	8.0E-01
Methyl phosphoric acid	1.2E+03	ca	1.8E+04	nc	7.3E+01	nc	7.3E+02	nc	1.5E+01	8.0E-01
Methyl styrene (mixture)	1.3E+02	nc	5.6E+02	nc	4.2E+01	nc	6.0E+01	nc	1.5E+01	8.0E-01
Methyl styrene (alpha)	6.8E+02	sat	6.8E+02	sat	2.6E+02	sat	4.3E+02	nc	1.5E+01	8.0E-01
Methyl tertbutyl ether (MTBE)	1.7E+01	ca	3.7E+01	ca	3.7E+00	ca	3.7E+01	ca	2.0E+00	1.0E+00
"CAL-Modified PRG"	9.2E+03	nc	1.0E+05	max	5.5E+02	nc	5.5E+03	nc	2.0E+00	1.0E+00
Methaclor (Dual)	1.5E+03	nc	2.2E+04	nc	9.1E+01	nc	9.1E+02	nc	2.0E+00	1.0E+00
Metrabuzin	2.7E-01	ca*	1.4E+00	ca	3.7E-03	ca	3.7E-02	ca	2.0E+00	1.0E+00
Mitelex	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc	2.0E+00	1.0E+00
Mollinate	3.9E+02	nc	1.0E+04	nc	1.8E+02	nc	1.8E+03	nc	2.0E+00	1.0E+00
Monochloramine	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc	2.0E+00	1.0E+00
Naled	1.2E+02	nc	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc	2.0E+00	1.0E+00
Naipompane	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.6E+03	nc	2.0E+00	1.0E+00
Nickel (soluble salts)	1.6E+03	nc	4.1E+04	nc	7.3E+02	nc	1.3E+02	7.0E+00	2.0E+00	1.0E+00
"CAL-Modified PRG" (PEA, 1994)	1.5E+02	nc	8.0E+03	nc	2.0E+00	nc	2.0E+00	nc	2.0E+00	1.0E+00
Nickel refinery dist	1.1E+04	ca	4.0E+03	ca	5.5E+01	nc	5.5E+01	nc	2.0E+00	1.0E+00
Nickel subsulfide	9.2E+01	nc	1.3E+03	nc	5.5E+00	nc	5.5E+01	nc	2.0E+00	1.0E+00
Nitrapyrin	7.8E+03	nc	1.0E+05	max	3.6E+03	nc	3.6E+03	nc	2.0E+00	1.0E+00
Nitrate	9.2E+01	nc	1.3E+03	nc	5.5E+00	nc	5.5E+01	nc	2.0E+00	1.0E+00
Nitric Oxide	3.5E+00	nc	5.0E+01	nc	2.1E+01	nc	2.1E+00	nc	2.0E+00	1.0E+00
Nitrile	2.0E+01	nc	1.1E+02	nc	2.1E+00	nc	2.1E+00	nc	2.0E+00	1.0E+00
Nitroaniline	4.3E+03	nc	8.2E+04	nc	2.6E+02	nc	2.6E+03	nc	2.0E+00	1.0E+00
Nitrobenzene	3.2E-01	ca	1.6E+00	ca	7.2E-04	ca	4.5E-02	ca	2.0E+00	1.0E+00
Nitrotoluazone	3.5E+01	ca	1.8E+02	ca	4.8E+01	ca	4.8E+00	ca	2.0E+00	1.0E+00
Nitrolycine	6.1E+03	nc	8.8E+04	nc	3.7E+02	nc	3.7E+03	nc	2.0E+00	1.0E+00
Nitrophenol	4.9E+02	nc	7.0E+03	nc	2.9E+01	nc	2.9E+02	nc	2.0E+00	1.0E+00
Nitropropane	7.2E-04	ca	1.2E+03	ca	1.2E+03	ca	1.2E+03	ca	2.0E+00	1.0E+00
2-Nitrophenol	2.4E+02	ca	6.1E+02	ca	2.0E+03	ca	2.0E+03	ca	2.0E+00	1.0E+00
4-Nitrophenol	6.1E+03	ca	8.8E+01	ca	2.4E+03	ca	2.4E+03	ca	2.0E+00	1.0E+00
2-Nitropropane	1.7E-01	ca	1.2E+00	ca	3.1E-03	ca	3.1E-03	ca	2.0E+00	1.0E+00
N-Nitrosodimethylamine	9.5E-03	ca	4.8E-02	ca	1.4E-04	ca	1.4E-03	ca	2.0E+00	1.0E+00
N-Nitrosodihydroamine	9.9E+01	ca	5.0E+02	ca	1.4E+00	ca	1.4E+01	ca	2.0E+00	1.0E+00
N-Nitrosodihydronaphthamine	6.9E-02	ca	3.5E-01	ca	9.6E-04	ca	9.6E-03	ca	2.0E+00	1.0E+00
N-Nitrosodihydronaphthalene	2.2E+02	ca	1.1E+01	ca	3.1E+04	ca	3.1E+03	ca	2.0E+00	1.0E+00
N-Nitrosodihydronaphthalene	2.3E+01	ca	1.2E+00	ca	3.1E-03	ca	3.1E-02	ca	2.0E+00	1.0E+00
N-Nitrosodihydronaphthalene	3.7E+02	nc	1.0E+03	sat	3.7E+01	nc	6.1E+01	nc	2.0E+00	1.0E+00
N-Nitrosodihydronaphthalene	3.7E+02	nc	1.0E+03	sat	3.7E+01	nc	6.1E+01	nc	2.0E+00	1.0E+00
D-Nitrotoluene	1.0E-02	h	1.0E-02	h	8.7E-22	h	8.7E-22	h	2.0E-02	1.0E-02
D-Nitrotoluene	1.0E-02	h	1.0E-02	h	9.8E-99	h	9.8E-99	h	2.0E-02	1.0E-02
Nitrofuran	4.0E-02	h	4.0E-02	h	2.73E-13	h	2.73E-13	h	5.0E-05	2.0E-06
Nitrofuran	4.0E-02	h	4.0E-02	h	3.6E-04	h	3.6E-04	h	1.5E+03	2.0E+03

FOR PLANNING PURPOSES

Note: =IRIS; 1=HEAEST; n=NICLA; e=WHITEHORN; o=Other EPA DOCUMENTS; -ROUTE EXTRAPOLATION; ca=CANCER PRG; nc=NONCANCER PRG; all=SOIL SATURATION max=CEILING LIMIT; "where nc < 100x ca" ...where nc < 100x ca)

TOXICITY INFORMATION										CONTAMINANT										PRELIMINARY REMEDIATION GOALS (PRGs)										SOIL SCREENING LEVELS									
Sf0 (mg/kg-d)	RfDc (mg/kg-d)	Sf1 (mg/kg-d)	RfD (mg/kg-d)	V _{skin} O _{abs}	C _{soil}	CAS No.	NR	Residential Soil (mg/kg)	Ambient Air Soil (mg/kg)	Top Water (mg/L)	Ground Water (mg/L)	Migration to Ground Water UAT 20 (mg/kg)	Migration to Surface Water UAT 10 (mg/kg)	Migration to Surface Water UAT 1 (mg/kg)																									
7.0E+04	-	-	7.0E+04	r 0 0 1	85509-19-9	NuStar	4.3E+01	6.2E+02	nc	2.6E+00	nc	2.6E+01	nc	1.1E+01	nc	1.1E+02	nc	1.8E+02	nc	2.6E+02	nc	3.7E+02	nc	5.7E+02	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc								
3.0E+03	-	-	3.0E+03	r 0 0 1	32536-32-0	Ociabromodiphenylphosphoramide	1.2E+02	1.8E+03	nc	7.3E+00	nc	7.3E+01	nc	1.8E+01	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc	1.8E+02	nc								
2.0E+03	h	-	2.0E+03	r 0 0 1	18044-88-3	Oxazalin	5.0E+02	1.0E+01	18066-30-6	23135-22-0	Oxamyl	1.5E+03	3.1E+02	4.4E+03	1.5E+03	2.2E+04	1.5E+03	9.1E+01	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc								
5.0E+02	-	-	5.0E+02	r 0 0 1	42874-03-3	Oxiflurofen	5.0E+02	1.0E+01	76736-62-0	Facloburazol	1.0E+02	1.8E+02	1.1E+03	1.0E+02	2.6E+03	1.0E+02	1.1E+04	1.0E+02	4.7E+01	nc	4.7E+02	nc	4.7E+02	nc	4.7E+02	nc	4.7E+02	nc	4.7E+02	nc									
5.0E+03	-	-	5.0E+03	r 0 0 1	4865-14-7	Paraquat	4.5E+03	1.0E+01	60839-5	Paraffin	2.7E+02	4.0E+03	4.0E+03	2.7E+02	5.3E+03	2.7E+02	5.3E+03	2.7E+02	2.2E+01	nc	2.2E+02	nc	2.2E+02	nc	2.2E+02	nc	2.2E+02	nc	2.2E+02	nc									
5.0E+02	h	-	5.0E+02	r 0 0 1	1114-71-2	Perbutal	5.0E+02	1.0E+01	40487-42-1	Fendimethalin	2.4E+03	3.5E+04	3.5E+04	2.4E+03	5.6E+04	2.4E+03	5.6E+04	2.4E+03	1.5E+02	nc	1.5E+03	nc	1.5E+03	nc	1.5E+03	nc	1.5E+03	nc	1.5E+03	nc									
2.0E+02	n	-	2.0E+02	r 0 0 1	87-84-3	Pentabromo-6-chloro cyclohexane	2.1E+01	c*	1.1E+02	Pentabromodiphenyl ether	4.9E+01	1.2E+02	1.2E+03	4.9E+01	1.8E+03	4.9E+01	1.8E+03	4.9E+01	7.3E+00	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc									
2.0E+01	h	3.0E+03	1.2E+01	r 0 0 1	3.0E+03	Pentachloronitrobenzene	1.9E+00	c*	9.5E+00	Permethrin	3.9E+01	1.0E+00	1.0E+03	3.9E+01	1.0E+03	3.9E+01	1.0E+03	3.9E+01	5.6E+02	c*	5.6E+02	c*	5.6E+02	c*	5.6E+02	c*	5.6E+02	c*	5.6E+02	c*									
1.2E+01	-	3.0E+02	1.2E+01	r 0 0 1	3.0E+02	p-Perchloroanisole	1.0E+00	c*	6.0E+00	Perchlorate	1.2E+02	1.0E+00	1.0E+03	1.2E+02	1.0E+03	1.2E+02	1.0E+03	1.2E+02	6.9E+02	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc									
5.0E+04	-	5.0E+04	4.0E+02	r 0 0 1	32534-81-9	Permethrin	3.1E+03	nc	4.4E+04	Phenmediphos	1.2E+02	1.0E+00	1.0E+05	1.2E+02	1.0E+05	1.2E+02	1.0E+05	1.2E+02	9.1E+01	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc	9.1E+02	nc									
5.0E+02	-	5.0E+02	5.0E+01	r 0 0 1	5.0E+02	Phenol	3.7E+04	nc	1.0E+05	Phenothiazine	1.2E+02	1.8E+03	1.8E+03	1.2E+02	2.6E+03	1.2E+02	2.6E+03	1.2E+02	7.3E+00	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc	7.3E+01	nc									
2.0E+01	h	2.0E+01	2.0E+01	r 0 0 1	2.0E+01	p-Phenylenediamine	3.7E+02	nc	5.3E+03	Phenylmercury acetate	1.2E+04	1.0E+04	1.0E+05	1.2E+04	1.0E+05	1.2E+04	1.0E+05	1.2E+04	6.9E+02	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc	6.9E+03	nc									
1.0E+01	-	1.0E+01	1.0E+01	r 0 0 1	1.0E+01	p-Phenylenediamine	4.9E+00	nc	7.0E+00	2-Phenylphenol	2.5E+02	1.3E+02	1.3E+03	2.5E+02	1.3E+03	2.5E+02	1.3E+03	2.5E+02	3.5E+00	ca	3.5E+01	ca	3.5E+01	ca	3.5E+01	ca	3.5E+01	ca	3.5E+01	ca									
8.0E+05	-	8.0E+05	8.0E+05	r 0 0 1	62-38-4	Phlorale	1.2E+03	nc	1.8E+02	Phosmet	1.2E+03	1.8E+02	1.8E+03	1.2E+03	1.8E+03	1.2E+03	1.8E+03	1.2E+03	7.3E+01	nc	7.3E+02	nc	7.3E+02	nc	7.3E+02	nc	7.3E+02	nc	7.3E+02	nc									
1.0E+03	h	1.0E+03	1.0E+03	r 0 0 1	90-43-7	2-Phenylphenol	1.0E+01	c*	1.2E+01	Phosphoric acid	1.8E+01	1.0E+01	1.0E+02	1.8E+01	1.0E+02	1.8E+01	1.0E+02	1.8E+01	3.1E+00	ca	3.1E+01	ca	3.1E+01	ca	3.1E+01	ca	3.1E+01	ca	3.1E+01	ca									
2.0E+04	h	2.0E+04	2.0E+04	r 0 0 1	2.0E+04	o-Phthalic acid	7.723-14-0	0 0 0 0	92-84-2	Phthalic anhydride	1.0E+05	1.0E+05	1.0E+05	1.0E+05	1.0E+05	1.0E+05	1.0E+05	1.0E+05	1.0E+05	max	3.7E+03	nc	3.7E+04	nc	3.7E+04	nc	3.7E+04	nc	3.7E+04	nc	3.7E+04	nc							
2.0E+00	-	2.0E+00	1.0E+00	r 0 0 1	1.0E+00	Phthalocyanine	7.0E+02	0 0 0 0	8544-9	Picloram	4.3E+03	6.2E+04	6.2E+04	4.3E+03	8.8E+03	4.3E+03	8.8E+03	4.3E+03	6.1E+02	nc	6.1E+03	nc	6.1E+03	nc	6.1E+03	nc	6.1E+03	nc	6.1E+03	nc									
8.9E+00	h	7.0E+06	8.9E+00	r 0 0 1	7.0E+06	Pirimiphos-methyl	5.5E+02	0 0 0 0	1918-02-1	Primosulf	2.2E+01	1.0E+02	1.0E+03	2.2E+01	1.0E+03	2.2E+01	1.0E+03	2.2E+01	2.8E+01	ca*	2.8E+02	ca*	2.8E+02	ca*	2.8E+02	ca*	2.8E+02	ca*	2.8E+02	ca*									
2.0E+00	-	2.0E+00	2.0E+00	r 0 0 1	2.0E+00	Polybrominated biphenyls [PCBs]	3.9E+01	0 0 0 0	1316-36-3	Phosphorus (White)	1.0E+01	1.0E+00	1.0E+01	1.0E+01	1.0E+00	1.0E+01	1.0E+00	1.0E+01	1.0E+01	9.6E+01	ca*	9.6E+02	ca*																
1.0E+00	-	1.0E+00	1.0E+00	r 0 0 1	1.0E+00	o-Phthalic acid	3.4E+02	0 0 0 0	100-21-0	Phthalocyanine	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	3.4E+03	ca	3.4E+03	ca	3.4E+03	ca	3.4E+03	ca	3.4E+03	ca	3.4E+03	ca									
2.0E+00	-	2.0E+00	1.0E+00	r 0 0 1	1.0E+00	Phthalocyanine	7.0E+02	0 0 0 0	11104-21-2	Picloram	6.2E+01	1.0E+00	1.0E+01	6.2E+01	1.0E+01	6.2E+01	1.0E+01	6.2E+01	2.9E+00	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca									
2.0E+00	-	2.0E+00	2.0E+00	r 0 0 1	2.0E+00	Pirimiphos-methyl	1.0E+02	0 0 0 0	11104-28-2	Picloram	6.2E+01	1.0E+00	1.0E+01	6.2E+01	1.0E+01	6.2E+01	1.0E+01	6.2E+01	2.9E+00	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca	2.9E+01	ca									
7.0E+01	h	7.0E+01	7.0E+01	r 0 0 1	7.0E+01	Benzobifluoranthene	6.2E+01	0 0 0 0	11104-29-2	Aroclor 1242	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	9.2E+00	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca									
7.0E+01	h	7.0E+01	7.0E+01	r 0 0 1	7.0E+01	Benzokillifluoranthene	6.2E+01	0 0 0 0	11104-31-5	Aroclor 1242	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	9.2E+00	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca									
7.0E+00	h	7.0E+00	7.0E+00	r 0 0 1	7.0E+00	"CAL-Modified PRG" (PEA, 1994)	6.2E+02	0 0 0 0	207-11-6	Aroclor 1242	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	9.2E+00	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca									
7.0E+00	h	7.0E+00	7.0E+00	r 0 0 1	7.0E+00	Benzolalpyrene	6.2E+01	0 0 0 0	207-21-6	Aroclor 1242	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	9.2E+00	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca									
7.0E+00	h	7.0E+00	7.0E+00	r 0 0 1	7.0E+00	Chrysene	6.2E+01	0 0 0 0	218-01-0	Aroclor 1240	2.2E+01	1.0E+00	1.0E+01	2.2E+01	1.0E+01	2.2E+01	1.0E+01	2.2E+01	9.2E+00	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca	9.2E+01	ca									

FOR PLANNING PURPOSES

Key : I=IRIS n=NHEST a=NCEA x=WITHDRAWN o=Other EPA DOCUMENTS f=ROUTE EXTRAPOLATION c=CANCER PRG n=NONCANCER PRG s=SOIL SATURATION LIMIT *=WELD nc < 1000 ca **(weld_nc < 1000 ca)

CONTAMINANT	PRELIMINARY REMEDIATION GOALS (PRGs)						SOIL SCREENING LEVELS					
	SF _o	RfDo (mg/kg-d)	SFI (mg/kg-d)	RI _{DI} (mg/kg-d)	V _{skin} O _{abs}	C _{sols}	CAS No.	Residential Soil (mg/g)	Industrial Soil (mg/g)	Ambient Air (µg/m ³)	Tap Water (µg/L)	Migration to Ground Water (µg/L)
7.2E+00 n 4.0E+02 3.1E+00 n 4.0E+02 0 0.13 53.70-3 208.44-0	"CAL-Modified PRG" (PEA, 1994) Dibenzanthranthracene Fluoranthene	6.1E+00 6.2E+02 2.3E+03	2.9E+01 3.0E+04	2.2E+03 1.5E+02	c* 9.2E-03 nc	2.0E+00 4.3E+03	8.0E-02 2.1E+02					
7.5E+01 n 3.1E+01 8.6E+04 1 9.1E+02 86.73-7 193.36-5 Indeno[1,2,3-cd]biphenyl Naphthalene	Fluorene	2.6E+03 6.2E+01	3.3E+04 2.9E+00	2.4E+02 2.2E+02	nc 9.2E-02 nc	5.6E+02 5.6E+01	2.8E+01 7.0E+01					
7.5E+02 1 7.5E+02 7.5E+02 1 2.0E+02 1 9.1E+02 1 129.00-0 Pyrene	Naphthalene	5.6E+01 5.6E+01	1.9E+02 1.9E+02	2.2E+02 3.1E+00	nc 6.2E+00 nc	8.4E+01 8.4E+01	4.0E+00 4.0E+00					
1.5E+01 1 1.5E+01 6.0E+03 h 1.5E+01 1 9.0E+03 1 0.01 263.96-36.0 Prochloraz	Pyrene	2.3E+03 3.2E+00	5.4E+04 1.6E+01	1.1E+02 4.5E+01	nc 1.1E+02 nc	4.2E+03 4.2E+03	2.1E+02 2.1E+02					
1.5E+01 1 1.5E+01 6.0E+03 h 1.5E+01 1 9.0E+03 1 0.01 263.96-36.0 Prochloraz	Prochloraz	3.2E+00 3.7E+02	4.5E+03 1.6E+01	4.5E+02 4.5E+01	nc 4.5E+02 nc	4.5E+01 4.5E+01	2.2E+02 2.2E+02					
1.5E+02 1 1.5E+02 7.5E+02 1 2.0E+02 1 9.1E+02 1 1610.16-0 Tritonol	Prochloraz	9.2E+02 4.6E+03	1.35E+04 3.5E+03	5.5E+04 6.6E+04	nc 5.5E+04 nc	5.5E+02 5.5E+02	nc nc					
4.0E+03 1 4.0E+03 7.5E+02 1 2.0E+02 1 9.1E+02 1 7287.19-6 Pronamide	Tritonol	2.4E+02 4.6E+03	1.05E+04 2.7E+02	1.15E+04 2.7E+02	nc 2.7E+03 nc	2.7E+03 2.7E+03	nc nc					
7.5E+02 1 7.5E+02 7.5E+02 1 2.0E+02 1 9.1E+02 1 1918.16-7 Propachlor	Pronamide	7.9E+02 7.9E+02	1.1E+04 1.1E+04	4.7E+04 4.7E+01	nc 4.7E+02 nc	4.7E+02 4.7E+02	nc nc					
1.5E+02 1 1.5E+02 5.0E+03 1 2.0E+02 1 9.0E+03 1 0.01 709.98-8 Propanil	Propachlor	3.1E+02 1.2E+03	4.4E+03 1.8E+02	4.4E+03 7.3E+01	nc 1.8E+02 nc	1.8E+02 1.8E+02	nc nc					
5.0E+03 1 5.0E+03 2.0E+02 1 2.0E+02 1 9.0E+03 1 0.01 2317.35-8 Propargyl alcohol	Propachlor	1.2E+03 1.2E+03	1.85E+04 1.85E+04	1.15E+04 1.85E+04	nc 7.3E+01 nc	7.3E+01 7.3E+01	nc nc					
2.0E+03 1 2.0E+03 2.0E+02 1 2.0E+02 1 9.0E+03 1 0.01 107.19-7 Propazine	Propazine	1.2E+02 1.2E+03	1.05E+04 1.8E+01	1.15E+04 7.3E+01	nc 7.3E+02 nc	7.3E+02 7.3E+02	nc nc					
2.0E+02 1 2.0E+02 2.0E+02 1 2.0E+02 1 9.0E+03 1 0.01 122.42-8 Propiconazole	Propazine	1.2E+02 1.2E+03	1.05E+04 1.8E+01	1.15E+04 7.3E+01	nc 7.3E+02 nc	7.3E+02 7.3E+02	nc nc					
1.5E+02 1 1.5E+02 1.0E+01 1 1.0E+01 1 9.0E+03 1 0.01 60207.90-1 Isopropylbenzene (Cumene)	Propiconazole	7.9E+02 1.6E+02	1.15E+04 5.2E+02	1.15E+04 5.2E+02	nc 4.7E+02 nc	4.7E+02 4.7E+02	nc nc					
1.0E+01 1 1.0E+01 1.0E+02 1 1.0E+02 1 9.0E+03 1 0.01 98.82-8 Isopropylbenzene (Cumene)	Isopropylbenzene (Cumene)	1.4E+02 1.4E+02	2.4E+02 2.4E+02	2.4E+02 3.7E+02	nc 4.0E+02 nc	6.6E+02 6.6E+02	nc nc					
1.0E+02 n 2.0E+01 1 2.0E+01 1 9.0E+03 1 0.01 103.65-1 n-Propylbenzene	Isopropylbenzene (Cumene)	1.0E+02 1.0E+03	1.05E+05 1.05E+05	1.05E+05 1.05E+05	max 7.3E+04 max	7.3E+04 7.3E+04	nc nc					
7.0E+01 n 7.0E+01 1 7.0E+01 1 9.0E+03 1 0.01 57.55-6 Propylene glycol, monoethyl ether	n-Propylbenzene	4.3E+04 4.3E+04	1.0E+05 1.0E+05	1.0E+05 2.6E+03	max 2.6E+03 nc	2.6E+04 2.6E+04	nc nc					
7.0E+01 n 7.0E+01 1 7.0E+01 1 9.0E+03 1 0.01 111.35-3 Propylene glycol, monomethyl ether	Propylene glycol, monoethyl ether	4.3E+04 4.3E+04	1.0E+05 1.0E+05	1.0E+05 2.1E+03	max 2.1E+03 nc	2.6E+04 2.6E+04	nc nc					
2.4E+01 1 8.6E+03 1 1.3E+02 1 8.6E+03 1 9.0E+03 1 0.01 75.56-9 Propylene oxide	Propylene oxide	1.9E+01 1.9E+01	9.1E+00 9.1E+00	9.1E+00 9.1E+01	ca* 2.2E+01 ca*	2.2E+01 2.2E+01	ca* ca*					
2.5E+01 1 2.5E+01 2.5E+02 1 2.5E+02 1 9.0E+03 1 0.01 91335.77-5 Pursulf	Pursulf	1.5E+04 1.5E+03	1.0E+05 2.2E+04	1.0E+05 9.1E+01	nc 9.1E+02 nc	9.1E+03 9.1E+03	nc nc					
2.5E+02 1 2.5E+02 2.5E+02 1 2.5E+02 1 9.0E+03 1 0.01 51630.56-1 Pyridin	Pursulf	6.1E+03 6.1E+03	8.8E+02 8.8E+02	8.8E+02 8.8E+02	nc 3.7E+01 nc	3.7E+01 3.7E+01	nc nc					
1.0E+03 1 1.0E+03 5.0E+04 1 1.2E+01 1 9.0E+03 1 0.01 109.86-1 Quinalohos	Pyridine	3.1E+01 4.1E+02	4.4E+02 4.4E+02	4.4E+02 4.4E+02	nc 1.8E+00 nc	1.8E+00 1.8E+00	nc nc					
5.0E+04 1 5.0E+04 5.0E+02 1 5.0E+02 1 9.0E+03 1 0.01 13593.03-8 Quindoline	Quinalohos	2.1E+01 5.6E+04	1.05E+04 5.6E+04	1.05E+04 5.6E+03	ca* ca*	5.6E+03 5.6E+03	ca* ca*					
1.1E+01 h 3.0E+01 1 1.1E+01 1 3.0E+03 1 0.01 121.82-4 RDX (Cyclonite)	Quindoline	4.4E+00 4.4E+00	2.2E+01 2.2E+01	2.2E+01 6.1E-01	ca* 6.1E-01 ca*	6.1E-01 6.1E-01	ca* ca*					
3.0E+02 1 3.0E+02 3.0E+02 1 3.0E+02 1 9.0E+03 1 0.01 10453.86-8 Resmelhrin	RDX (Cyclonite)	1.9E+03 1.9E+03	2.6E+04 2.6E+04	2.6E+04 1.1E+02	nc 1.1E+02 nc	1.1E+03 1.1E+03	nc nc					
3.0E+02 1 3.0E+02 5.0E+02 1 5.0E+02 1 9.0E+03 1 0.01 289.84-3 Ronnel	Resmelhrin	3.1E+03 3.1E+03	4.4E+04 4.4E+04	4.4E+04 1.8E+02	nc 1.8E+02 nc	1.8E+03 1.8E+03	nc nc					
4.0E+03 1 4.0E+03 2.5E+02 1 2.5E+02 1 9.0E+03 1 0.01 93.79-4 Rotenone	Ronnel	2.4E+02 2.4E+02	3.5E+03 3.5E+03	3.5E+03 1.5E+01	nc 1.5E+02 nc	1.5E+02 1.5E+02	nc nc					
2.5E+02 1 2.5E+02 2.5E+02 1 2.5E+02 1 9.0E+03 1 0.01 76587.05-0 Saivey	Rotenone	1.5E+03 1.5E+03	2.2E+04 2.2E+04	2.2E+04 9.1E+01	nc 9.1E+01 nc	9.1E+01 9.1E+01	nc nc					
5.0E+03 1 5.0E+03 1 7.0E+03 1 7.0E+03 1 9.0E+03 1 0.01 7783.00-8 Selenious Acid	Saivey	3.1E+02 3.1E+02	4.4E+03 4.4E+03	4.4E+03 5.1E+01	nc 5.1E+01 nc	1.8E+02 1.8E+02	nc nc					
5.0E+03 1 5.0E+03 6.0E+02 1 6.0E+02 1 9.0E+03 1 0.01 7782.49-2 Selenium	Selenious Acid	3.9E+02 3.9E+02	1.0E+04 1.0E+04	1.0E+04 1.0E+04	nc 1.0E+04 nc	1.0E+02 1.0E+02	nc nc					
5.0E+03 1 5.0E+03 6.0E+02 1 6.0E+02 1 9.0E+03 1 0.01 630.10-4 Selexoxydin	Selenium	5.5E+03 5.5E+03	4.4E+03 7.9E+04	4.4E+03 7.9E+04	nc 3.3E+02 nc	3.3E+03 3.3E+03	nc nc					
9.0E+02 1 9.0E+02 5.0E+03 1 5.0E+03 1 9.0E+03 1 0.01 74051.80-2 Silver and compounds	Selexoxydin	3.9E+02 3.9E+02	1.0E+04 1.0E+04	1.0E+04 1.0E+04	nc 1.0E+02 nc	1.0E+02 1.0E+02	nc nc					
1.2E+01 h 5.0E+03 1 1.2E+03 1 1.2E+03 1 9.0E+03 1 0.01 7440.22-4 Sunazine	Silver and compounds	4.1E+00 4.1E+00	1.0E+05 1.0E+05	1.0E+05 1.0E+05	max 1.0E+05 max	2.2E+04 2.2E+04	2.0E+00 2.0E+00					
2.0E+01 1 2.0E+01 2.0E+01 1 2.0E+01 1 9.0E+03 1 0.01 122.34-5 Sodium azide	Sunazine	1.2E+00 1.2E+00	1.4E+03 1.4E+03	1.4E+03 1.4E+03	nc 1.4E+00 nc	1.4E+01 1.4E+01	1.4E+00 1.4E+00					
2.7E+01 h 3.0E+02 1 2.7E+01 1 3.0E+02 1 9.0E+03 1 0.01 148.18-5 Sodium diethylthiocarbamate	Sodium azide	1.8E+00 1.8E+00	9.1E+00 9.1E+00	9.1E+00 9.1E+00	nc 9.1E+00 nc	2.5E+01 2.5E+01	2.0E+00 2.0E+00					
2.0E+05 1 2.0E+05 1.0E+03 1 1.0E+03 1 9.0E+03 1 0.01 62.74-8 Sodium fluoracetale	Sodium diethylthiocarbamate	6.1E+01 6.1E+01	8.8E+02 8.8E+02	8.8E+02 8.8E+02	nc 7.3E+02 nc	7.3E+01 7.3E+01	7.0E+00 7.0E+00					
6.0E+01 1 6.0E+01 1 6.0E+01 1 9.0E+03 1 0.01 17116.28-8 Sodium metavanadate	Sodium fluoracetale	4.7E+04 4.7E+04	1.0E+05 1.0E+05	1.0E+05 1.0E+05	nc 1.0E+04 nc	2.2E+04 2.2E+04	2.0E+00 2.0E+00					
3.0E+04 1 3.0E+04 2.0E+01 1 2.0E+01 1 9.0E+03 1 0.01 100.42-5 Styrene	Sodium metavanadate	1.8E+01 1.7E+03	1.4E+00 1.4E+00	1.4E+00 1.4E+00	sat 1.4E+00 sat	1.1E+01 1.1E+01	5.6E-01 5.6E-01					
1.0E+03 h 1.5E+05 1 1.5E+05 1 1.5E+05 1 9.0E+03 1 0.01 8867.19-0 Systane	Styrene	1.5E+03 1.5E+03	2.2E+04 2.2E+04	2.2E+04 2.2E+04	nc 2.2E+04 nc	9.1E+02 9.1E+02	4.0E+00 4.0E+00					
1.5E+05 h 2.0E+02 1 1.5E+05 h 1.5E+05 1 9.0E+03 1 0.01 1746.01-6 Svsthane	Systane	3.9E+06 3.9E+06	2.7E+04 2.7E+04	2.7E+04 2.7E+04	ca* 4.5E+07 ca*	4.5E+07 4.5E+07	4.0E+00 4.0E+00					
7.0E+02 1 7.0E+02 2.0E+02 1 2.0E+02 1 9.0E+03 1 0.01 34014.18-1 Tephthuiron	Svsthane	4.3E+03 4.3E+03	8.2E+03 8.2E+03	8.2E+03 8.2E+03	nc 2.8E+03 nc	2.8E+03 2.8E+03	2.0E+00 2.0E+00					
2.0E+02 h 2.0E+02 1 1.3E+02 1 1.3E+02 1 9.0E+03 1 0.01 3393.98-8 Temebhos	Tephthuiron	1.2E+03 7.9E+02	1.8E+04 1.8E+04	1.8E+04 1.8E+04	nc 7.3E+01 nc	7.3E+01 7.3E+01	2.0E+00 2.0E+00					
1.3E+02 1 1.3E+02 1 1.3E+02 1 9.0E+03 1 0.01 6902.51-2 Terbacil	Temebos	7.9E+02 7.9E+02	1.1E+04 1.1E+04	1.1E+04 1.1E+04	nc 4.7E+02 nc	4.7E+02 4.7E+02	2.0E+00 2.0E+00					

FOR PLANNING PURPOSES

Nef = HESI; n = HCEA; * = WILDRAWN; o = Other EPA DOCUMENTS; # = ROUTE EXTRAPOLATION; c = CANCER PRG; nc = NONCANCER PRG; si = SOIL SATURATION; max = CEILING LIMIT; * (where, nc < 100X ca) ** (where, nc < 10X ca)

PRELIMINARY REMEDIATION GOALS (PRGs)									
SOIL SCREENING LEVELS									
CONTAMINANT									
	SF ₆ (μg/kg-d) n	RfD _c (μg/kg-d) n	SC ₁ (μg/kg-d) n	RfC ₁ (μg/kg-d) n	V _{skin} C _{abs} C _{soils} C _{soil}	CAS No.	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ug/m ³) n
Terbutol	2.6E-05 h	2.5E-05	1.0 0 1	13071-79-9			1.5E+00 nc	2.2E+01 nc	9.1E-02 nc
Terbutryn	1.0E-03	1.0E-03	1.0 0 1	886-50-0			6.1E-01 nc	8.8E+02 nc	3.7E+00 nc
Tetrachlorobenzenes	3.0E-04	1.0E-02	1.0 0 1	65-94-3			1.8E-01 nc	2.6E+02 nc	1.1E+01 nc
1,1,1,2-Tetrachloroethane	2.6E-02	1.0E-02	1.0 0 1	610-20-6			3.0E+00 nc	7.0E+00 nc	2.6E-01 nc
1,1,2,2-Tetrachloroethane	2.0E-01	8.0E-02	1.0 0 1	76-34-5			3.8E-01 nc	9.0E-01 nc	3.3E-02 nc
TetraChloroethylene (PCE)	5.2E-02 n	1.0E-02	1.0 0 1	127-14-4			5.7E+00 nc	1.9E+01 nc	5.5E-02 nc
TOTAL Modified PRG™ (PEA, 1994)									3.0E-03 nc
2,3,4,6-Tetrachlorophenol	2.0E-01 h	3.0E-02	1.0 0 1	58-90-2			1.8E+03 nc	2.6E+04 nc	1.1E+02 nc
p,p,p-tetrachlorotoluene		2.0E-01	1.0 0 1	5216-25-1			2.4E-02 nc	1.2E-01 nc	1.1E+03 nc
Tetrachlorovinylidene	2.1E-02 h	2.4E-02	1.0 0 1	961-11-5			2.0E+01 nc	2.0E+02 nc	2.8E-01 nc
Tetraethyltinovrophosphate	7.6E-03 n	2.1E-01 n	5.0 0 4	3689-24-5			3.1E+01 nc	4.4E+02 nc	1.8E+00 nc
Tetrahydrofuran	6.6E-05 h	6.8E-03 n	0.6 0 2	109-99-9			6.4E+01 nc	3.2E+02 nc	9.9E-01 nc
Thallium and compounds							5.2E+00 nc	1.3E+02 nc	2.4E+00 nc
Thiocyanate	1.0E-02 h		1.0 0 2	7446-18-6			6.1E+02 nc	8.6E+03 nc	3.7E+01 nc
Thiobencarb	1.0E-01 n	1.0E-01	1.0 0 1	28249-77-6			6.1E+03 nc	1.0E+05 max	3.6E+02 nc
Thiocyanate	1.0E-01 n	1.0E-01	1.0 0 1	n/a			6.1E+03 nc	1.0E+05 max	3.6E+03 nc
Thiophanox	2.0E-04 h	1.0E-04	1.0 0 1	19166-18-4			1.8E+01 nc	2.6E+02 nc	1.1E+00 nc
Thiophanate-methyl	4.0E-02	6.0E-02	1.0 0 1	23564-05-8			4.9E-03 nc	7.0E+04 nc	2.9E+02 nc
Thiram	5.0E-01	1.0E-01	1.0 0 1	137-26-8			3.1E+02 nc	4.4E+03 nc	1.8E+01 nc
Tin (Inorganic); see Tributyltin oxide for organic form	6.0E-01 h	2.0E-01	1.1E-01	0			4.7E+04 nc	1.0E+05 max	2.2E+04 nc
Toluene	3.2E+00 h	3.2E+00	1.0 0 7	104-88-3			5.2E+02 sal	5.2E+02 sat	4.0E+02 nc
Toluene-2,4-diamine			1.0 0 1	95-80-7			1.5E+01 nc	7.7E+01 nc	2.1E+02 nc
Toluene-2,5-diamine	6.0E-01 h	6.0E-01	1.0 0 1	65-70-5			3.7E+04 nc	1.0E+05 max	1.1E+00 nc
Toluene-2,6-diamine			2.0E-01	0.0 1	623-40-5		1.2E+04 nc	2.0E+05 max	7.3E+03 nc
p-Toluidine	5.0E-01	1.0E-01	1.0 0 1	106-49-0			2.6E+00 nc	1.3E+01 nc	3.5E-02 nc
Toxaphene	1.1E+00 h	1.1E+00	1.0 0 1	8001-35-2			4.4E+01 nc	2.2E+00 nc	6.0E-03 nc
Tralomelithrin	7.5E-03 h		7.5E-03	1.0 0 1	66841-25-6		4.6E+02 nc	6.6E+03 nc	2.7E+01 nc
Triazine	1.1E-02 h	1.0E-02	1.0 0 1	203-17-5			7.9E+02 nc	1.1E+04 nc	4.7E+02 nc
Triasulfuron	1.0E-02 h	1.0E-02	1.0 0 1	82097-50-5			6.7E+02 nc	8.8E+03 nc	3.7E+01 nc
1,2,4-Tribromobenzene	5.0E-03 h	5.0E-03	1.0 0 1	615-54-3			3.1E+02 nc	4.4E+03 nc	1.8E+02 nc
Tributyltin oxide (TBTO)	3.0E-04 h		0.0 0 1	56-35-9			1.8E+01 nc	2.6E+02 nc	1.1E+01 nc
Trichlorofamidine	3.4E-02 h	3.4E-02	1.0 0 1	634-93-5			1.4E+01 nc	7.3E+07 nc	2.0E+01 nc
Trichloroaniline hydrochloride	2.9E-02 h	2.9E-02	1.0 0 1	33663-50-2			1.7E+01 nc	8.5E+01 nc	2.3E-01 nc
2,4,6-Trichlorobenzene	1.0E-02 h	1.0E-02	1.0 0 1	120-82-1			6.5E+02 nc	3.0E+03 nc	2.3E+00 nc
1,1,1-Trichloroethane	2.0E-02 h	2.9E-01	1.0 1	71-55-6			6.3E+02 nc	1.0E+03 nc	1.9E+02 nc
1,1,2-Trichloroethane	4.0E-03 h	4.0E-02	1.0 0 1	79-00-5			8.4E-01 nc	1.9E+00 nc	1.2E+01 nc
Trichloroethylene (TCE)	1.1E-02 h	6.0E-03	1.0 0 1	79-01-6			2.8E+00 nc	6.1E+00 nc	1.1E+00 nc
Trichlorotrifluoroethane	3.0E-01 h	2.0E-01	1.0 1	75-69-4			3.9E+02 nc	7.3E+03 nc	3.7E+02 nc
Trichloroethylene	1.0E-01 h	1.0E-01	1.0 0 1	65-95-4			6.1E+03 nc	8.8E+04 nc	3.7E+03 nc
Trichlorophenol			0.0 0 2	48-06-2			4.4E+01 nc	2.2E+02 nc	6.2E-01 nc
2,4,6-Trichlorophenoxyacetic Acid	5.7E-02 h	4.0E-03	1.0 0 1	52-76-5			8.4E-01 nc	1.1E+00 nc	2.0E+02 nc
2,4,5-Trichlorotoluoloxyl propionic acid	8.0E-03 h	8.0E-03	1.0 0 1	93-72-1			4.9E+02 nc	7.0E+03 nc	3.7E+02 nc
Trichloropropene	5.0E-03 h	5.0E-03	1.0 0 1	588-77-6			1.5E+01 nc	1.8E+01 nc	3.0E+01 nc
1,2,3-Trichloropropane	7.0E-100 h	7.0E-00	1.0 0 1	96-18-4			1.4E-03 nc	3.1E-03 nc	9.6E-04 nc
1,2,3-Trichlorotoluene		5.0E-03	1.0 0 1	66-16-5			1.2E+01 nc	1.8E+01 nc	1.6E-03 nc
1,2,3-Trichloro-1,2,2-trifluoroethane	3.0E-01 h	3.0E-03	1.0 0 1	56138-08-2			5.6E+03 nc	5.6E+03 nc	3.1E+04 nc
Triethylamine	2.0E-03 h	2.0E-03	1.0 0 1	121-44-4			1.8E+02 nc	2.6E+03 nc	8.8E+01 nc
Trifluralin	7.7E-03 h	7.7E-03	1.0 0 1	508-77-6			6.3E+01 nc	8.8E+01 nc	8.7E+00 nc
Trinitrolic Anhydride (TIANA)	1.4E-04 h	1.4E-04	1.0 0 1	532-30-7			8.6E+00 nc	1.2E+02 nc	5.1E+00 nc
1,2,4-Trinitrobenzene	6.0E-02 h	1.0E-02	1.0 0 1	66-03-8			5.2E+01 nc	1.7E+02 nc	1.2E+01 nc
1,3,5-Trinitrobenzene	4.0E-02 h	4.0E-02	1.0 0 1	104-97-6			2.1E+01 nc	7.0E+01 nc	1.2E+01 nc
Triphenyl Phosphate	1.7E-02 h	1.7E-02	1.0 0 1	512-56-1			1.3E+01 nc	6.7E+01 nc	1.3E+00 nc
1,3,5-Trinitrotoluene	3.0E-02 h	3.0E-02	1.0 0 1	98-35-4			1.8E+03 nc	2.6E+04 nc	1.1E+03 nc
Trinitrophenylmethyltriazine	1.0E-02 h	1.0E-02	1.0 0 1	479-45-8			6.1E+02 nc	8.8E+03 nc	3.7E+02 nc

Key: \circ =Hazard \square =NCEA \triangle =WITHDRAWN \diamond =Other EPA DOCUMENTS \times =ROUTE EXTRAPOLATION \star =CANCER PRG \square =NONCANCER PRG SI =SOIL SATURATION max =CEILING LIMIT Wh = $\text{nc} < 100 \text{ ca}$ Whe = $\text{nc} < 10 \text{ ca}$

FOR PLANNING PURPOSES

TOXICITY INFORMATION

Contaminant	Preliminary Remediation Goals (PRGs)					
	Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (ng/m ³)	Tap Water (ug/l)	Migration to Ground Water (ug/l)	Migration to Surface Water (ug/l)
TOXICITY INFORMATION						
	RfD _o 1/(mg/kg d)	SF _o V ₁ (mg/kg d)	RfD _i O _{abs} C soils (mg/kg d)	V _{skin} O _{abs} C soils (mg/kg d)	CAS No	
3.0E-02	5.0E-04	3.0E-02	5.0E-04	1 0 0 1	118 96 7	2.4.6. Trinitrodiene Triphenylborosphine oxide Tris(2-chlorovinyl) phosphate
1.4E-02	1.0E-01	6 3.0E-01	1.0E-01	1 0 0 1	791 28 6	Uranium (Chemical Toxicity Only)
2.0E-04	0	2.0E-04	0	0 1	115 94 8	Vanadium and compounds
1.0E-01	1.0E-01	1.0E-01	1.0E-01	0 0 0 1	1440 61 0	Venham
1.0E-03	1.0E-03	1.0E-03	1.0E-03	0 0 0 1	102.9 77.7	Vinclozolin
2.5E-02	2.5E-02	2.5E-02	2.5E-02	1 0 0 1	50471 44 8	Vinyl acetate
1.1E-01	1.0E-00	1.0E-01	5.7E-02	1 0 0.5 4	593 60 2	Vinyl bromide (bromoethene)
8.6E-04	8.6E-04	1.1E-01	8.6E-04	1 0 0 1	7501 4	Vinyl Chloride (Chloroflatum)
1.5E-00	1.0E-03	3.1E-02	2.9E-02	1 0 0 1	7501 4	Vinyl chloride (adult)
7.5E-01	3.0E-03	1.0E-02	2.9E-02	1 0 0 1	7601 4	Warfarin
3.0E-04	3.0E-04	3.0E-04	3.0E-04	0 0 0 1	8181 2	Xylenes
2.0E-00	2.0E-01	2.0E-01	2.0E-01	x 1 0 1	1330 20 7	ZINC
3.0E-01	3.0E-04	0	0	0 0 0 1	7440 66 6	Zinc phosphide
5.0E-02	5.0E-02	5.0E-02	5.0E-02	0 0 0 1	1314 84 7	Zineb
					12122 67 7	

SOIL SCREENING LEVELS						
Migration to Ground Water						
	DAF 20	DAF 10	DAF 5	DAF 1	DAF 0.5	DAF 0.1
Residential Soil (mg/kg)	1.6E+01 ca**	8.2E+01 ca**	2.2E+00 ca**	3.7E+02 nc	3.6E+03 nc	1.6E+03 ca
Industrial Soil (mg/kg)	3.5E+01 ca	4.8E+02 ca	4.1E+02 ca	4.1E+02 nc	4.8E+00 nc	4.8E+00 ca
Ambient Air (ng/m ³)	7.3E+00 nc	2.6E+02 nc	3.7E+00 nc	3.6E+01 nc	6.0E+03 nc	6.0E+03 nc
Tap Water (ug/l)	7.3E+00 nc	2.6E+02 nc	3.7E+00 nc	3.6E+01 nc	6.0E+03 nc	6.0E+03 nc
Migration to Surface Water (ug/l)	7.3E+00 nc	2.6E+02 nc	3.7E+00 nc	3.6E+01 nc	6.0E+03 nc	6.0E+03 nc